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ABSTRACT

The purpose of this monograph is to familiarize physical education teacher educators with the process and content associated with a National Council for the Accreditation of Teacher Education (NCATE) review of undergraduate physical education teacher education programs. A framework was developed that reflects the state of the art in terms of teacher preparation in physical education, soundly based in the literature concerning teacher education in physical education, and acceptable to a majority of teacher education professionals. Generalized guidelines were developed that reflect three inter-related components of physical education teacher education--the study of physical education teaching speciality, physical education as a profession, and pedagogical elements of physical education. The first section of the monograph is an instructional manual for NCATE evaluations at the undergraduate and graduate levels, and advanced programs. Section two presents guidelines and standards for undergraduate academic courses in physical education. (JD)

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# PHYSICAL EDUCATION NCATE GUIDELINES

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# PHYSICAL EDUCATION NCATE GUIDELINES

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AN ASSOCIATION OF THE AMERICAN ALLIANCE FOR HEALTH, PHYSICAL EDUCATION, RECREATION, AND DANCE

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The American Alliance for Health, Physical
Education, Recreation, and Dance
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Reston, Virginia 22091

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# Purposes of the American Alliance For Health, Physical Education, Recreation and Dance

The American Alliance is an educational organization, structured for the purposes of supporting, encouraging, and providing assistance to member groups and their personnel throughout the nation as they seek to initiate, develop, and conduct programs in health, leisure, and movement-related activities for the enrichment of human life.

Alliance objectives include:

1. Professional growth and development—to support, encourage, and provide guidance in the development and conduct of programs in health, leisure, and movement-related activities which are based on the needs, interests, and inherent capacities of the individual in today's society.
2. Communication—to facilitate public and professional understanding and appreciation of the importance and value of health, leisure, and movement-related activities as they contribute toward human well-being.
3. Research—to encourage and facilitate research which will enrich the depth and scope of health, leisure, and movement-related activities; and to disseminate the findings to the profession and other interested and concerned publics.
4. Standards and guidelines—to further the continuous development and evaluation of standards within the profession for personnel and programs in health, leisure, and movement-related activities.
5. Public affairs—to coordinate and administer a planned program of professional, public, and governmental relations that will improve education in areas of health, leisure, and movement-related activities.
6. To conduct such other activities as shall be approved by the Board of Governors and the Alliance Assembly, provided that the Alliance shall not engage in any activity which would be inconsistent with the status of an educational and charitable organization as defined in Section 501(c)(3) of the Internal Revenue Code of 1954 or any successor provision thereto, and none of the said purposes shall at any time be deemed or construed to be purposes other than the public benefit purposes and objectives consistent with such educational and charitable status. *Bylaws, Article III*

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PART A

# Instructional Manual for Physical Education NCATE Evaluations at the Undergraduate, Master's, and Doctoral Levels

January 1987

J. William Douglas, Stan Brassie,
Robert L. Wiegand, and Dean A. Pease

## PREFACE

The development of the National Council for the Accreditation of Teacher Education (NCATE) approved curriculum guidelines for undergraduate, masters, and doctoral program levels is the culmination of years of work by elementary, secondary, and college and university physical educators. These guidelines are the result of NCATE's decision to permit learned societies to develop their own specialty studies component. Of particular significance in the development of the guidelines was the opportunity provided all physical educators who are members of the American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD) to react to the guidelines. They, in turn, provided feedback to the National Association for Sport and Physical Education (NASPE) task forces who wrote the guidelines.

Deep gratitude and appreciation is extended to the physical educators who served on the undergraduate and graduate task forces. The undergraduate participants included Jane Clark, Neil Dougherty, J. William Douglas (Chair), B. J. Herzog, Dean A. Pease, Mike Sherman, Laura Timmerman, and Robert L. Wiegand. The graduate members included Stan Brassie (Chair), Dave Clark, Jim Ewers, Warren Fraleigh, Jerald Landwer, Wayne McKinney, and Dale Mood.

Thanks also are extended to the officers of NCATE and NASPE for their counsel and support during the development of the guidelines. Additionally, heartfelt acknowledgement is given to the faculties at James Madison University and the University of Florida for permitting members of the task forces to field test their guidelines and procedures at these institutions.

Finally, thanks are extended to the secretaries at West Virginia University and the University of Georgia who gave their time and energy to type the many drafts of this instructional manual.

J. William Douglas

# SECTION ONE

## UNDERGRADUATE PROGRAM LEVEL

# INTRODUCTION

Significant changes have been made by the National Council for the Accreditation of Teacher Education (NCATE) with respect to the content, i.e., the specialty studies component, and to the process for evaluation of the accreditation guidelines. Appropriately, NCATE invited its learned societies in the subject matter areas to develop their content and evaluative process. The American Alliance for Health, Physical Education, Recreation, and Dance (AAHPERD), the learned society for physical education and a member of NCATE, responded to this opportunity. AAHPERD designated the National Association for Sport and Physical Education (NASPE) and its College and University Physical Education Council (CUPEC) as the representative body to be responsible for this project.

Throughout the development of the content (hereafter referred to as guidelines) and process for evaluation, the CUPEC appointed task force endeavored to keep the AAHPERD membership informed and to solicit its input. Consequently, the profession and NCATE affiliated institutions have become increasingly aware of the guidelines, and, to a lesser degree, the process. The purpose of this section of the instructional manual is to continue the dissemination of this information by providing specific process and content information related to an NCATE evaluation of basic physical education teacher education programs. This information will be advantageous to all teacher educators in physical education, and, particularly to those individuals at institutions scheduled for an NCATE accreditation visit in 1989 and thereafter. Brief coverage is provided related to the history of the project, an overview of the guidelines, the curriculum portfolio, the reader, the adjudication committee, and a synopsis of the evaluation process from

institutional submittal to approval. In-depth coverage is provided for the curriculum portfolio (Chapter 1), the reader (Chapter 2), and the adjudication committee (Chapter 3). The guidelines for the undergraduate preparation of teachers of physical education are included in Chapter 4. Finally, the recommended guidelines for faculty, students, resources and facilities, and evaluation are contained in Chapter 5.

History of the Project.

In 1983, the CUPEC task force consisting of elementary, secondary, and collegiate physical education teachers and teacher educators began to develop guidelines appropriate to the specialty studies component for undergraduate physical education teacher education programs. These guidelines were presented to the profession at several national, district, and state conferences and in the Spring, 1984, issue of Update. Feedback from the preceding was discussed by the task force and modifications to the guidelines were made. In October, 1984, a working copy of an instructional manual for reporting institutions and readers was developed. The guidelines and the manual were then field tested at James Madison University. In November, 1984, the task force finalized the guidelines and approved the evaluative process as contained in the instructional manual. The guidelines were approved by the NASPE Delegate Assembly at the 1985 AAHPERD National Convention. They were approved by NCATE in March, 1986, and became effective in September, 1987.

Overview of the Guidelines

The foremost concern of the task force was the development of a conceptual framework that represented the specific preparation of physical education teachers. A framework was sought that would reflect the state of the art in terms of teacher preparation in physical education, be soundly based

in the literature concerning teacher education in physical education, and be acceptable to a majority of the teacher education professionals in physical education. The framework that evolved from these considerations was relatively simple. It was decided that teacher education in physical education has three interrelated components. These are the study of physical education teaching speciality, physical education as a profession, and pedagogical elements of physical education.

Utilizing this conceptual framework, a set of generalized guidelines were developed to be used by teacher preparatory institutions for developing and upgrading their programs. This generalized approach was considered more desirable than a more definitive, restrictive singular model for teacher preparation. While all members of the task force had very specific ideas about how physical education teachers should be prepared, it was recognized that each of these models was highly idiosyncratic and none was representative of the entire profession. After considerable discussion, guidelines were developed to permit each institution preparing physical education teachers to make critical decisions about the departmental focus as well as the specific competencies the department desired of its product.

The task force did, however, mandate that each department state the competencies desired of its students upon graduation and define the strategy to be utilized in providing educational experiences for students so that these competencies might be acquired. In addition, and possibly most significant, was the mandate that all departments be able to provide evidence that their graduates possess the competencies upon graduation.

Curriculum Portfolio

A curriculum portfolio will be prepared by the institution's physical education teacher education administrator. This portfolio will demonstrate the manner in which the institution has addressed each of the 23 guidelines.

The curriculum portfolio will include cover pages, i.e., listing of courses required to meet the guidelines, course outlines for each course listed on the cover pages, and a matrix. The matrix is the most critical aspect in that it identifies the program competencies, the educational opportunities to accomplish these competencies, and the assessment of the educational opportunities to their learning outcomes.

NCATE Reader

A significant revision in the NCATE accreditation procedure is the inclusion of subject matter readers to review portfolios prepared for evaluation by the institution being evaluated. Historically, NCATE was criticized for its failure to have subject matter members on the on-site visitation team. NCATE defended this position by stating it was impractical to represent every subject area preparing teachers on every visitation team. In the future, this criticism will be minimized inasmuch as every NCATE on-site visit will be preceded by an evaluation by certified readers in the subject matter. The review will take place at the home locality of the readers, and the information generated by the readers will be transmitted systematically to the AAHPERD Adjudication Committee for their consideration and ultimate recommendation to NCATE. While this process does not completely rectify the problem of, perhaps, not having a disciplinary specific professional assigned to an on-site accreditation team, it does insure that a specialist will be involved in every NCATE accreditation evaluation. It also should affirm that the specialty studies guidelines have been adequately met.

To be selected by NASPE as a certified reader, it will be necessary for all interested professionals engaged in teacher preparation to attend a reader workshop and to submit their curriculum vita to NASPE, Attention: NCATE Physical Education Review. The first group of certified readers will be selected prior to November, 1987.

The purpose of the reader is to determine if: (1) the delineated competencies satisfy the intent of the professional studies standards, (2) the educational opportunities provided enhance the acquisition of the delineated competencies, (3) the process of evaluating student attainment of the competencies is well described and valid, and (4) the evidence provided, i.e., the results of the evaluation adequately reflect the satisfactory attainment of each delineated competency.

NASPE Adjudication Committee

A number of certified readers will be appointed by NASPE to serve as the Adjudication Committee. NASPE will also appoint a member of the committee to coordinate all NCATE evaluations. The coordinator will be responsible for selecting the three readers as well as a member of the Adjudication Committee for each institutional evaluation.

When each reader has completed the evaluation of the institution's curriculum portfolio, a written review will be submitted to NASPE. When each of the three reviews have been received, the NASPE staff member will send these responses to the designated member of the ajudication committee for review. An extensive written response indicating the results of the review, i.e., approve or disapprove, will be prepared by this individual and will be submitted to NCATE.

Process from Submittal to Approval

To assist institutions who are currently planning for an on-site evaluation by NCATE in 1989, or thereafter, the following step by step procedures with explanatory information are offered:

Step 1 - All undergraduate physical education teacher education administration and faculty at the institutional level should become familiar with the revised NCATE guidelines approved for physical education in 1986. It is imperative that this be done a minimum of three years in advance of a scheduled on-site visit.

Step 2 - The total program should be evaluated immediately to determine the extent to which the present program meets the new NCATE guidelines and process.

Step 3 - All course outlines (syllabi) should be reviewed to insure that (1) specific program competencies have been identified, (2) learning experiences have been designed, and (3) the method of evaluation for each competency and the minimum performance level has been determined.

Step 4 - Faculty should immediately begin collecting minimum student performance data to be able to substantiate that performance competencies have been met. Data must be collected for a minimum of one year prior to submittal of the curriculum portfolio.

Step 5 - The physical education teacher education administrator should prepare the curriculum portfolio in accordance with the directions provided in this instructional manual and by using the response forms cited in Chapter 1. This portfolio must be submitted to NCATE as a part of the institution's pre-condition report a minimum of 18 months prior to the anticipated on-site evaluation date. The procedure for the institution's response to NCATE is delineated in NCATE Standards, Procedures, and Policies for the Accreditation of Professional Teacher Education Units (1986), a publication of NCATE. To obtain a copy of this publication

write NCATE, 1919 Pennsylvania Avenue, N.W., Suite 202, Washington, D.C. 20006.

Step 7 - The curriculum portfolio for physical education will be submitted by NCATE to NASPE. This will then be distributed to three NASPE certified readers. They will complete their review in accordance with the procedures delineated in the instructions for the physical education reader (Chapter 2).

Step 8 - The readers will return their institutional review to NASPE. These reviews will be forwarded to the designated member of the NASPE Adjudication Committee. This individual will compile the information from the readers into a final report. This report will indicate the results of the review.

Step 9 - In the event the recommendation in Step 8 is unfavorable, NCATE will advise the institution that it can file a rejoinder. This will include providing documented evidence to refute negative citations by the Adjudication Committee. This report will be returned to NCATE and then be forwarded to NASPE for another review.

Step 10 - If the second review remains unfavorable, the institution will again be notified in writing. The institution can then request that a NASPE approved representative be commissioned to make an on-site visitation to the institution. This individual will investigate the previously identified deficiencies. The report of this individual to NCATE will be the final report. NCATE will then make the final decision and the futuristic considerations in the event of a negative report.

In the chapters to follow, physical education teacher educators will become familiar with the process and content associated with an NCATE review of undergraduate physical education teacher education programs.

# CHAPTER 1

## CURRICULUM PORTFOLIO

This chapter will assist institutions in describing the specialty studies component for the undergraduate preparation of physical education teachers. As delineated in the GUIDELINES, the specialty studies component is organized within a conceptual model that includes three elements: (1) the body of knowledge supporting the physical education teaching specialty; (2) physical education as a profession; and (3) pedagogical physical education. These elements are designed to be carefully integrated so that prospective physical educators can master their body of knowledge, actively participate in the research and service activities of the profession, and provide quality instruction for both typical and exceptional learners in multicultural settings.

To demonstrate that the GUIDELINES have been met, physical education-teacher education programs (PETE) must: (1) delineate the specific competencies included in their programs that contribute to the attainment of the guidelines; (2) demonstrate that educational opportunities exist to meet all stated competencies; (3) describe how these competencies are evaluated; and (4) provide evidence that these competencies have been met by prospective physical education teachers. The following is a recommended format to assist institutions in providing this information when completing the curriculum portfolio.

## Curriculum Portfolio:

## Cover Pages and Course Outlines

The institution will submit to NCATE a report that will include cover pages, course outlines, and matrices for each of the elements contained within the specialty studies component. A brief discussion of each section follows.

### Cover Pages

The institution must list on the cover pages (see page 21) the courses (by departments, course number, and course title) required of all students in the PETE program. (See example at the end of this chapter.) It is from these courses that the guidelines in each of the three elements must be met. The course number must be labeled with an alphanumeric code (e.g., PED 123, REC 239, PSY 398). Listing of departments, course numbers, and course titles must be congruent with official institutional catalogs.

### Course Outlines

Copies of all course outlines (syllabi) are to be attached as an appendix. The outlines must contain the expected competencies (objectives) for that course. (See example at the end of this chapter.) Only those outlines which contain competencies that satisfy the corresponding guidelines within that element are to be included. In essence, the competencies within the courses are means by which the program is linked to the guidelines. The competencies must be listed numerically for easy reference in the matrix.

While it is through stated competencies that the specific guidelines can be satisfied, two additional dimensions of program adequacy are crucial: (1) how the competencies are learned and (2) how well the competencies are learned. To ascertain this, the learning experiences for each competency must be described,

and the performance of the students relative to each competency must be evaluated. These dimensions are reported in the matrix.

## Curriculum Portfolio:

## The Matrix

The matrix (see example at the end of this chapter) enables institutions to align the specific guidelines in each of the three elements of specialty studies with (1) their program outcomes in the form of competencies or objectives, (2) the learning opportunities they have designed to accomplish those outcomes, and (3) their assessment of those learning experiences relative to their intended outcomes. After compiling the cover pages and the course outlines for each of the three elements, the matrix sections are to be completed in accordance with the following procedures:

### Column A: Guidelines Numbers

The first column (Column A) contains the number of the specialty studies component as designated by NCATE (1-23). These guidelines are to be listed (numbered) sequentially in the curriculum portfolio.

### Column B: Program Courses

Aligned with the appropriate guideline, the course containing the competencies used to meet that guideline are to be listed by alphanumeric code in Column B.

### Column C: Program Competencies

All competencies related to each guideline must be enumerated accordingly in Column C. This is done by listing the numbers corresponding to the competencies (objectives) on the appropriate course outlines. Separate each competency by a comma. Then, circle the two or three competencies that are considered most

relative to meeting the guideline. Only the competencies that are relative to the particular guideline in question should be listed in Column C.

Column D: Educational Opportunities

This section of the matrix enables reporting institutions to describe the various learning experiences associated with the corresponding courses offered in the PETE program. It is assumed that more detailed information is available on the attached course outlines. A discussion of the kinds of information to be provided in the matrix follows. Such information should be provided in clear, concise, narrative form.

1. Activities. Describe the activities/tasks that students perform to achieve the competencies associated with each guideline.
2. Methods. Describe the teaching/learning processes (e.g. methods, strategies, styles) that enable students to achieve the competencies associated with each guideline.
3. Resources. Describe the special resources (e.g. equipment, facilities, materials, personnel) that are required to support the teaching/learning processes associated with each guideline.

Column E: Competency Assessment

Reporting institutions must provide evidence to demonstrate their students' attainment of stated competencies. This section of the matrix provides the most crucial information for those evaluating the PETE program. Reporting institutions are to: (1) describe the evaluative strategies used to assess student performance on each competency associated with each guideline, and (2) report

the results of that assessment. The kinds of information requested in the narrative follow:

Description of Assessment

1. Type. Describe the instruments and procedures used to evaluate students' progress toward and achievement of the competencies associated with each guideline.
2. Rationale. Describe how the evaluative strategies relate to the competencies. (Does the assessment strategy accurately assess the competency?)
3. Participants. Identify the people (e.g. students, teachers, supervisors) involved in student evaluation and describe their specific roles in the process.

Rules of Assessment

4. Success Rate. Indicate the percentage of students that actually achieve the competencies associated with each guideline.

## Conclusion

It is possible that a particular course might include competencies that satisfy guidelines in more than one element of specialty studies. In this case, appropriate cover pages, course outlines, and all matrix information must be included within each element so as to adequately satisfy each guideline.

The cover pages and matrix sheets provide a general format for preparatory institutions to describe how their PETE program meets the guidelines. While it is expected that this format be followed, it is not intended to be restrictive nor inhibiting. Institutions have the prerogative to provide additional information to further describe their PETE program. For example, reporting institutions might wish to offer an interpretive "Comments Section" that expands and

enriches the descriptions in the matrix sections or course outlines. If additional comments are needed, they are to be recorded on clearly marked extra pages following the appropriate sections of each matrix.

It is recognized that the procedures in this section may be perceived to be cumbersome and time consuming. However, it is believed that institutions who conscientiously adhere to the procedures described will be engaged in a meaningful self-study that will ultimately lead to the enhancement of their PETE programs.

Example

*COVER PAGE III

Courses Required for Pedagogical Physical Education

(Guidelines 21-23)

| Department Name | Course Number | Course Title |
|---|---|---|
| PE | 177 | Pre-Student Teaching Practicum |
| PE | 126 | Individualized, Diagnostic/Prescriptive Physical Education |
| C&I | 180 | Teaching Strategies |
| Psych | 62 | Applying Learning Theory |

NOTE: All additional courses related to Guidelines 21-23, must be listed on this Cover Page.

*Cover Pages I (Guidelines 1-13) and II (Guidelines 14-20) are to be completed in a like manner to Cover Page III.

EXAMPLE

Course Outline

PE 177 Pre-Student Teacher Practicum

## Purpose

The intent of this course is to provide prospective physical education teachers with learning experiences enabling them to develop the necessary pedagogical competencies required for successful student teaching. Practicum students will instructionally interact with medium size classes (approximately 15 students) of heterogenously group students. The secondary school students will be primarily learning individual physical education and sport skills. The methodological emphasis in the classes will be individualized instruction that is diagnostic/prescriptive in nature.

## Competencies

Practicum students are expected to demonstrate competency in the following methodological areas:

1) implementation of individualized, diagnostic and prescriptive education programs;
2) successful management of medium sized physical education classrooms;
3) teaching behaviors including appropriate use of feedback, instruction and observation;
4) constructing instructional environments so that their students are appropriately engaged.

## Evaluation

To successfully complete this educational experience and to meet the competencies described above, the practicum student must accomplish or demonstrate the following after 20 hours of instructional contact:

1) operate an individualized, diagnostic/prescriptive instructional system utilizing at least 10 skill acquisition stations;
2) appropriately place all students into the individualized, programmed instructional curriculum which must be designed for developmental appropriateness;
3) employ a communication system so that each student within the class will know on an individual basis what is expected of them in that class;
4) employ a management plan that will provide for optimal rates of student performance relevant to the teacher originated class expectations;
5) produce instructional sequences of observe/instruct/provide feedback of at least three per minute;
6) produce at least four times the amount of positive feedback to correctional feedback;
7) spend less than 10% of the total class time involved in managerial behavior;
8) provide an educational environment so that the secondary school students will spend: a) at least 40% of total class time in appropriate motor activity; b) less than 15% of the class time waiting; and, c) less than 10% of the class time off task.

Example

MATRIX III

Describing Pedagogical Physical Education
(Guidelines 21-23)

| -A- Guideline Number | -B- Course Number | -C- Program Competencies | -D- Educational Opportunities | -E- Competency Assessment | |
|---|---|---|---|---|---|
| | | | | Description | Results |
| 22 | PPE 177 | 1-4 | 1) Practicum students are provided with a class of approximately 15 secondary school students to practice teaching; constant supervision and feedback are provided the practicum students by university supervisors. | 1) Behavioral assessments are made by trained university supervisors at the end of the 20 day instructional period | 1) 80% of practicum students successfully complete the experience in 20 days; 95% master competencies within a semester (75 days). |

*Matrices I (Guidelines 1-13) and II (Guidelines 14-20) are to be completed in a like manner to Matrix III.

## CHAPTER 2

## PHYSICAL EDUCATION READER

The purpose of this section is to define and to describe the role of the Physical Education Reader in the NCATE accreditation process. Institutions seeking NCATE accreditation will have received the Guidelines. Based upon their thorough self-study, the curriculum portfolio will have been completed. Three physical education readers will evaluate and score the portfolio relative to the Guidelines. The readers' evaluation will be returned to AAHPERD. They will forward the evaluations to the AAHPERD Adjudication Committee. This committee will review the readers' findings and, ultimately, recommend to NCATE their accreditation decision.

Historically, NCATE examinations of physical education programs have not been conducted by professional physical education specialists. As a result, it has been extremely difficult to differentiate the weak from the strong programs. The implementation of the Physical Education Readers by NCATE is an attempt to rectify that loophole in the review process. Since this is the only opportunity for physical educators to be guaranteed involvement in the accrediation process, the reader is the crucial link to ensure that quality prevails. While guidelines were written in an attempt to ensure and enhance the quality of excellence of teacher preparation programs in physical education across the country, it will be only through the efforts of the readers that this goal will be realized.

The curriculum portfolio submitted to NCATE and then processed through AAHPERD to the readers will focus on three areas of information: (1) a delineation of program competencies which contribute to the attainment of the specific guidelines (1-23); (2) a description of the educational opportunities (learning experiences) which enhance the acquisition of the delineated competencies; and (3) evidence that the delineated competencies have been attained by

the students of that program. The purpose of the reader is to determine: (1) the degree to which the delineated competencies satisfy the intent of the Guidelines; (2) the extent to which the educational opportunities enhance the acquisition of the delineated competencies; (3) the degree to which the process of evaluating student attainment of the competencies is well described and valid; and (4) whether the evidence provided (i.e., the results of the evaluation) adequately reflects the satisfactory attainment of each delineated competency.

The remainder of this section provides rules and procedures to assist the reader in carrying out the evaluative function.

## PROCEDURES

The curriculum portfolio will address the specialty studies component of the NCATE accreditation process. The conceptual model for this component include three elements: (1) the body of knowledge supporting the physical education teaching specialty; (2) physical education as a profession; and (3) pedagogical physical education. There are guidelines associated with each element which the institution must satisfy. The portfolio will be submitted in an attempt to demonstrate compliance with the guidelines.

The portfolio will contain cover pages, course outlines, and matrices. These documents will provide the information upon which the readers will evaluate the program in question. With the exception of the course outlines, each of these documents should be provided for each of the three elements of the specialty studies component. Examples of these forms are contained in Chapter 1 ("Curriculum Portfolio").

## Cover Pages

The cover pages contain courses listed by departments, course numbers, and course titles required of all students in the PETE program. It is from these courses that the guidelines in each of the three elements are met. Hence, Cover Pages I, II, and III will be included. The courses, presumably, will be different for each element, although courses may be used to satisfy guidelines in more than one element.

## Course Outlines

Outlines or syllabi for all courses listed on the cover pages will be included. Contained within each course outline will be intended program outcomes in the form of competencies or objectives which, when met, will satisfy the guidelines. In other words, it is through the competencies that are learned and assessed within the courses that the program will satisfy the guidelines. The competencies will be listed numerically in the course outlines for easy referral later in the matrix.

## Matrix

The matrix contains information which enables the institution to align the guidelines in each of the three areas of specialty studies (Column A) with courses (Column B), competencies contained within those courses (Column C), educational opportunities (learning experiences) to accomplish those competencies (Column D), and the assessment of those learning experiences in relation to the competencies (Column E). Each course will be listed alphanumerically according to the cover pages, and the competencies will be listed numerically as stated in the corresponding course outline.

The matrix will provide the information necessary to enable the readers to determine the degree to which a program satisfies the guidelines. In particular, the readers must determine the degree to which the competencies (Column C) satisfy the intent of the guidelines, the learning experiences (Column D) enhance acquisition of the competencies, and the evaluation (Column E) is valid and the results confirm attainment of the competencies. Rules and procedures for scoring the matrix follow.

Scoring Column C: (Program Competencies)

1. For each guideline, review all delineated competencies for their relevancy to the intent of the guideline. This is determined by reviewing the actual course outlines and determining the relevancy of each competency designated in the Matrix. If a competency is not relevant to the guideline, strike a line through the corresponding number on the matrix report.
2. After all competencies are reviewed FOR EACH GUIDELINE, make a judgment as to the degree to which the RELEVANT competencies satisfy the intent of the guideline.
3. Score the judgment on the Reader's Scoresheet (See example at the end of this chapter) in Column C according to the following scale:
   2 = if the intent of the guideline is adequately supported by relevant competencies
   1 = if the intent of the guideline is inadequately supported by relevant competencies
   0 = if the intent of the guideline is not supported by relevant competencies.

4. For those guidelines that are judged to be inadequately supported by competencies (i.e., for the guidelines that receive a "1" in Column C), a further explanation must follow the "1" in Column C on the Reader's Scoresheet. To simplify the recording of this explanation, the following coded responses should be used:

   A = Some or all of the competencies provided are not relevant to the intent of the guideline.

   B = There is an inadequate number of related competencies provided to satisfy the intent of the guideline.

   C = There is inadequate depth contained within the competencies to satisfy the intent of the guideline.

   D = The relevance of the competency to the guideline cannot be ascertained from the materials provided.

   * = Use an asterisk to represent any comment not included in the above coding system (see #5 below).

5. Whenever an asterisk is used, an explanatory comment must be provided on the "Comments" section of the Reader's Scoresheet. (See example at the end of this chapter.) NOTE: While an asterisk may be placed any time an explanatory comment is deemed appropriate, all "1A's" must be followed by an asterisk and those competencies determined to not be relevant to the guideline must be listed in the "Comments" section of the Scoresheet.

Scoring Column D: (Educational Opportunities)

1. For each RELEVANT competency, judge the degree to which the educational opportunities stated in Column D on the matrix and in the course outline, enhance the acquisition of the competency.

2. Score the judgment on the Reader's Scoresheet in Column D according to the following scale:

   2 = if the educational opportunities adequately support the acquisition of the competency

   1 = if the educational opportunities inadequately support the acquisition of the competency

   0 = if the educational opportunities do not support the acquisition of the competency.

3. For those educational opportunities judged to inadequately demonstrate enhancement of the acquisition of the competency (i.e., receive a "1" in Column D) a further explanation must follow the "1" in Column D on the Reader's Scoresheet. Place an asterisk after the "1" in Column D on the Scoresheet and indicate the reason for the "1" in the "Comments" section of the Scoresheet.

Scoring Column E: (Competency Assessment)

1. As indicated in the Competency Assessment section of Chapter 1 ("Curriculum Portfolio"), there are four kinds of information requested in Column E of the matrix. Three of those four areas are related to describing the process by which the competencies are being evaluated (i.e., type, rationale and participants) and one is related to providing results (i.e., success rate).

2. When reading the Competency Assessment section (Column E of the matrix and in the course outlines), judge each RELEVANT competency according to the degree to which the evaluation process is valid (description) and whether the evidence is indicative of the competency actually being attained (results).

3. Score the judgment on the Reader's Scoresheet in Column E according to the following scale:

   2 = both description and results are adequately provided.

   1 = either description or results are adequately provided but not both

   0 = neither description nor results are adequately provided

4. For those RELEVANT competencies which receive a "1" in Column E, a further explanation must follow the "1" in Column E on the Reader's Scoresheet according to the following scale:

   A = inadequate description is provided

   B = inadequate results are provided

## SUMMARY

While somewhat redundant, it will be helpful to review some general rules that the Readers should follow. A one page summary of the scoring rules are provided at the end of this chapter for the reader's convenience.

1. First, according to the information provided on the Matrix of the curriculum portfolio, the readers should go to the competency statements in the course outlines and judge each for its relevance to the respective guidelines being examined. Note on the matrix competencies that are not relevant.

2. Judge the degree to which all remaining RELEVANT competencies satisfy the intent of that guideline. Score that guideline accordingly in Column C.

   A. If the score in Column C is a "1" (i.e., the intent of the guideline is inadequately provided for), further describe the reasons for that judgment following the "1" in Column C as well as in the "Comments" section if appropriate.

3. If the reason for a "1" in Column C is because some or all of the competencies provided are not relevant to the intent of the guideline (Explanation A), an asterisk must follow the "1A" in Column C on the Scoresheet and the non-relevant competencies must be listed in the "Comments" section of the Scoresheet.
4. Proceed to Column D and Column E only for those competencies deemed relevant to that particular guideline.
5. As you review Column D, give benefit of doubt to the institution that the educational opportunities do enhance the attainment of the competencies. In other words, if the competency is relevant and a program description is provided (not obviously inadequate), award a "2" in Column D. Only when the assessment section is inadequate will there be doubt as to whether the learning experiences are satisfactory. This will be determined by the AAHPERD Adjudication Committee.

## CONCLUSION

When appropriate, a reader should recommend to the AAHPERD Adjudication Committee that an inadequte number of guidelines are being satisfied and, as a result, there is serious question regarding the degree of the adequacy that the program is preparing teachers. This judgment should be supported by the number of "0's" on your Reader's Scoresheet, particularly in Column C and to a lesser degree in Column D.

PHYSICAL EDUCATION READER SCORESHEET

Institution Being Evaluated _____

Reader _____

Date of Evaluation _____

| Guidelines | -C- Program Competencies | -D- Educational Opportunities | -E- Competency Evaluation |
|---|---|---|---|
| 1. fundamental motor skills | | | |
| 2. games and sports | | | |
| 3. outdoor leisure pursuits | | | |
| 4. dance | | | |
| 5. health-related fitness | | | |
| 6. physiological | | | |
| 7. anatomical | | | |
| 8. mechanical | | | |
| 9. historical | | | |
| 10. sociological | | | |
| 11. psychological | | | |
| 12. philosophical | | | |
| 13. developmental | | | |
| 14. forces - phys. ed. | | | |
| 15. effects of phys. ed. | | | |
| 16. philosophies of phys. ed. | | | |
| 17. implications of phys. ed. philosophies | | | |
| 18. soc./psych. dynamics | | | |
| 19. phys. ed. within education | | | |
| 20. curriculum of phys. ed. | | | |
| 21. planning | | | |
| 22. implementing | 1B* | 2 | 2 |
| 23. evaluating | | | |

*Comments on back

READER COMMENTS

| Guideline # | Comments |
| --- | --- |
| 22 | Since this is an example, only a partial list of competencies were provided. Thus the number of competencies is judged as inadequate. |

## SUMMARY OF SCORING RULES

### Column C: Program Competencies

2 = The intent of the guideline is adequately supported by relevant competencies.

1 = The intent of the guideline is inadequately supported by relevant competencies.

- A = Some or all of the competencies provided are not relevant to the intent of the guideline.
  - * = Listing of irrelevant competencies
- B = There is an inadequate number of related competencies provided (i.e., "scant") to satisfy the intent of the guideline
- C = There is inadequate depth contained within the competencies to satisfy the intent of the guideline
- D = The relevance of the competency to the guideline cannot be ascertained from the materials provided
- E = No competencies are provided to meet the total intent of the guideline.

0 = The intent of the guideline is not supported by relevant competencies.

* = Additional explanatory comments (if any)

### Column D: Educational Opportunities

2 = The educational opportunities adequately support the acquisition of the relevant competencies.

1 = The educational opportunities inadequately support the acquisition of the relevant competencies.
* = further explanation of inadequacy

0 = The educational opportunities do not support the acquisition of the relevant competencies

### Column E: Competency Evaluation

2 = Both description and results are adequately provided.

1 = Either description or results is adequately provided (but not both)
- A = inadequate description is provided
- B = inadequate results are provided

0 = Neither description nor results adequately provided

## CHAPTER 3

## AAHPERD ADJUDICATION COMMITTEE

Specialized physical education readers have been carefully selected and trained by NASPE to provide you with detailed information about the specific institutional physical education program being reviewed. The readers who reviewed this program were trained to be vigorous and selective in appraising the program. As an AAHPERD Adjudication Committee member, you are the final link in the upgrading process.

Three readers have reviewed the curriculum portfolio very carefully relative to the guidelines and have determined the degree to which (1) adequate competencies are provided in the program to satisfy each standard; (2) adequate educational opportunities are provided in the program to acquire the competency; (3) adequate description is provided of how the competencies are evaluated; and (4) adequate evidence is provided to ensure the attainment of the competencies. It is from this evidence (#4 above) that the learning experiences and the competencies are deemed adequate and that the guidelines are declared met. You are asked to review Chapter 2 ("Physical Education Reader") to become familiar with the spirit and information provided you by the readers.

### Instructions

The readers have analyzed and scored the curriculum portfolio and recorded all information on a Reader's Scoresheet. The front side of the Scoresheet is the actual results of a reader's assessment. It is with these scores that you will investigate the program and confirm the adequacy or inadequacy of the program. Space is reserved on the Reader's Scoresheet for comments and clarification by the reader to assist the adjudication committee in its review.

Generally, a reader will place a "2", a "1", or a "0" in the appropriate column to describe the reader's assessment of that category. You are encouraged to consult the Summary of Scoring Rules at the end of Chapter 2 for a more detailed summary of the scores. For those areas where the criteria are inadequately provided (i.e., receive a "1"), an explanation of how or why they are inadequate will follow the "1". Further, an asterisk may be placed, and in some cases must be placed, on the Scoresheet and a further explanation provided by the reader on the "Comments" section.

It is possible that scores of "0" and "1" were received because of confusion by a reader, an inadequate opportunity by the institution to explain and support its documentation, or perhaps, simply oversight by either. Rather than allow a reader to make absolute judgment regarding program adequacy, the final judgment will be made by the Adjudication Committee. They will confirm the findings of the readers (in the case of "0's") or to review further those areas that appear inadequate (in the case of "1's"). For those areas judged to be inadequate, the Committee will also be asked to change each "1" or "0" to a "0" or "2" as appropriate after reviewing all three Reader's scoresheets. The Committee's culminating responsibility is to prepare a final, synthesized Adjudication Committee Scoresheet and the corresponding NCATE Compliance with Speciality Guidelines sheet. (See examples at the end of this chapter.)

There is a suggested systematic order in which the Adjudication Committee is to follow in order to confirm or alter the findings of the readers. Following these steps will ensure that the scores received in each of the three columns for any one guideline are consistent with each other, and that no score will be reviewed more than once.

Column C: Program Competencies

1. Proceed down Column C. For each "0", confirm by reviewing all three of the readers' scores that no competencies exist in the course outlines which directly satisfy the intent of the guidelines. Changing a "0" to a score of "1" is not an alternative because all "1's" must ultimaely be converted to a "0" or "2". To change a score, simply mark through the existing score and enter the new score beside it. This will help to eliminate duplication in the examination of competencies.
2. For each "0" in Column C which is confirmed, change all scores in Columns D and E to "0's". Obviously, if the competencies do not satisfy the intent of the guidelines, the related educational opportunities and assessment are not applicable.
3. Once all "0's" are confirmed, proceed again down Column C, addressing all "1's". Remember, the institution received a "1" because the institution did not adequately meet the guideline. (A "0" was awarded if they were not meeting the guideline in any way.) The institution must provide additional competencies from the course outlines. This information, when combined with the few if any relevant competencies already provided in the Curriculum Portfolio, must convince you that the intent of the guideline is satisfied. If so, change the "1" to a "2". If nót, change the "1" to a "0" and "0" out columns D and E accordingly. Information may be available on the "Comments" section of the Reader's Scoresheet which may help clarify what was and was not judged relevent to the guideline. This information may also assist in later discussions with institutional representatives.

Column E: Competency Assessment

Column D is to be bypassed intentionally at this time. Proceed to Column E. This column will be the most difficult to confirm, but it is the most important. All aspects of program adequacy rest with competency assessment.

1. Proceed down Column E confirming all "0's" by reviewing all three readers' scores. Determine whether the methods of assessing those competencies, based upon their description, were not in fact valid AND the results they provided either were not derived directly from the assessment or were not reflective of the competency being satisfactorily attained. Remember, a score of "0" was obtained because they provided neither an adequate description nor adequate results. They must now provide both since a score of "1" is not an alternative. (For an example of a "2" awarded by a reader, you might want to look at Column E of the Reader's Scoresheet for a "2' and then peruse the corresponding information on the matrix of the Curriculum Portfolio.) If both description and results are adequately presented, change the "0" to a "2." (If a "2" is awarded, be certain that all related educational opportunities in Column D are awarded a "2" as well.) If both are not adequately provided, the "0" should stand. NOTE: As you proceed down Column E confirming scores of "0", you may ignore all "0's" that exist because Column C received a "0" (i.e., you may ignore "0's" in Column E that resulted when Column C was "0'd" out).
2. Once all "0's" are confirmed, proceed again down Column E addressing all "1's." Remember, the institution received a "1" from a Reader because either the description was not adequate or the results were

not adequate. Be careful not to be put into a position of re-examining or questioning a reader's judgment. Rather, utilize information provided by the other two readers' scoresheets in an attempt to adjudicate competency assessment. Change the "1" to a "2" if the description now presents a valid means of assessing the competency (if they received a "1A" on the Reader's Scoresheet) or if the results are derived from that described assessment and now reflect the competency being satisfactorily attained (if they received a "1B" on the Reader's Scoresheet). If you are not convinced, after reviewing all three Readers' scoresheets, that the institution is adequately assessing the competency (i.e, the assessment is valid) or that the institution is providing results that are derived from the described assessment and that those results suggest that the competency is being satisfactorily attained, change the "1" to a "0".

Column D: Educational Opportunities

1. For the first time (including the evaluation by the reader), Column D must be carefully scrutinized and evaluated. Up to this time, Column D has been only superficially examined. If a "0" was awarded in Column C then a "0" was automatically awarded in Column D (and Column E). If a "1" was given in Column C, Column D received a "2" as a result of the benefit of doubt (i.e., good faith intent to satisfy the competency). Only if Column D was obviously and blatently not conducive to the enhancement of the competency was a score of "0" or "1" awarded. This is justified because the "proof" of Column D is with the evidence,

(i.e., Column E). Only when the evidence does not support that the learning opportunities satisfy the enhancement of the competency must you look closely at those opportunities. Hence, you must now determine the content validity of the educational opportunities.

2. Ignore all "O's" in Column E that exist because Column C received a "O". FOR ALL OTHER "O's" IN COLUMN E, examine closely the corresponding Educational Opportunities in Column D of the matrix and in course outlines for their ability to enhance the acquisition of the competency. In other words, now that it has been acknowledged that there is inadequate data to support that the educational opportunities are conducive to the attainment of the competency, a face value judgment must be made. Therefore, for all "O's" in Column E <u>other than those awarded because the competencies in Column C received a "O" and thus Columns D and E were "O'd" out</u>, examine and judge the degree to which the corresponding educational opportunities in Column D on the matrix of the Curriculum Portfolio and in the course outlines enhance the acquisition of the competency. Confirm or alter the judgment of the reader on the Reader's Scoresheet in Column D according to the following scale:

   2 = the educational opportunities adequately support the acquisition of the competency

   1 = the educational opportunities inadequately support the acquisition of the competency

   0 = the educational opportunities do not support the acquisition of the competency.

## CONCLUSION

Granting program approval rests with the evidence you have available that the program adequately satisfies the intent of the guidelines. After systematically validating all scores provided by the Physical Education Reader, there will be reasonably valid evidence available by which to make an approval recommendation. Ultimately, the Scoresheet will consist of scores of "0" or "2." Upon comparing the number of "0's" to the number of "2's", judgments can be made regarding program adequacy.

You will now prepare your report and submit it to NASPE, c/o NCATE Undergraduate Physical Education.

ADJUDICATION COMMITTEE SCORESHEET

Institution Being Evaluated _____

Adjudicator _____

Date of Evaluation _____

| Guidelines | -C- Program Competencies | -D- Educational Opportunities | -E- Competency Evaluation |
|---|---|---|---|
| 1. fundamental motor skills | | | |
| 2. games and sports | | | |
| 3. outdoor leisure pursuits | | | |
| 4. dance | | | |
| 5. health-related fitness | | | |
| 6. physiological | | | |
| 7. anatomical | | | |
| 8. mechanical | | | |
| 9. historical | | | |
| 10. sociological | | | |
| 11. psychological | | | |
| 12. philosophical | | | |
| 13. developmental | | | |
| 14. forces - phys. ed. | | | |
| 15. effects of phys. ed. | | | |
| 16. philosophies of phys. ed. | | | |
| 17. implications of phys. ed. philosophies | | | |
| 18. soc./psych. dynamics | | | |
| 19. phys. ed. within education | | | |
| 20. curriculum of phys. ed. | | | |
| 21. planning | | | |
| 22. implementing | | | |
| 23. evaluating | | | |

*Comments on back

ADJUDICATOR'S COMMENTS

| Guideline # | Comments |
| --- | --- |

47

NCATE

Compliance with Specialty Guidelines

Professional Organization _____

Institution Submitting Program _____

Program _____ Degree Level(s) _____

GUIDELINES/COMPETENCIES ADEQUATELY ADDRESSED: _____

_____

_____

_____

_____

_____

GUIDELINES/COMPETENCIES NOT ADEQUATELY ADDRESSED: _____

_____

_____

_____

_____

_____

GUIDELINES/COMPETENCIES CONTRADICTED OR NOT MET: _____

_____

_____

_____

_____

_____

PERCEIVED PROGRAM STRENGTHS: _____

_____

_____

_____

--OVER--

PERCEIVED PROGRAM WEAKNESSES: _____

_____

_____

_____

_____

OTHER COMMENTS: _____

_____

_____

_____

_____

PROFESSIONAL ASSOCIATION'S RECOMMENDATION REGARDING COMPLIANCE OR NONCOMPLIANCE WITH THE SPECIALTY GUIDELINES (i.e. has the institution adequately met the specialty guidelines?):

_____

_____

_____

_____

_____

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CHAPTER 4

# GUIDELINES FOR THE UNDERGRADUATE PREPARATION OF TEACHERS OF PHYSICAL EDUCATION*

The specialty studies component of a curriculum designed to prepare physical education teachers should be distinguishable from the general studies component. The General Studies component includes subject matter deemed desirable for all students, regardless of their respective disciplines; the specialty studies component covers all the knowledge, skills, and attitudes required of a physical education teacher. The classification of study as general or professional does not depend on the name of the study or the department in which the instruction is offered; it depends on the function the study is to perform. Furthermore, the dual classification scheme does not preclude students from taking subjects in general education that may be needed to support their teaching specialty in physical education.

The designation of the elements in the specialty studies component is not intended to prescribe a particular model for physical education-teacher education programs. It is, however, intended to provide a framework within which an institution can describe and review the professional studies component of its physical education-teacher education curriculum.

The specialty studies component of the physical education-teacher education curriculum is organized within a conceptual model focusing on human movement which includes three elements. These include the study of (1) the physical education teaching specialty, (2) professional physical education, and (3) pedagogical physical education. These elements are carefully integrated so that

*The NCATE approved curriculum guidelines for basic programs in physical education also can be found in NCATE Approved Curriculum Guidelines , a publication of the National Council for Accreditation of Teacher Education.

prospective physical educators can master the content of their teaching specialty, actively participate in the research and service activities of the profession, and provide quality instruction for both typical and exceptional learners in multi-cultural settings.

Physical Education Teaching Specialty

Human movement is the unique content of the physical education teaching specialty. This domain of study can be subdivided into the art of human movement and the science of human movement.

The human movement arts consist of forms of activity such as games, sports, aquatics, dance, exercise and health related fitness. These activities are part of the human lifestyle and are tightly intertwined with the cultural heritage of all societies. In this component of the physical education-teacher education curriculum, prospective teachers acquire the knowledge, skills, and attitudes needed for teaching movement activities to future pupils.

The human movement sciences consist of bodies of knowledge from the physical education sub-disciplines. Insights from these sub-disciplines have enriched and expanded our understanding about the anatomical, biomechanical, developmental, historical, pedagogical, philosophical, physiological, psychological, and socio-cultural aspects of motor performance. Traditionally, studies in the movement sciences have been viewed as intellectual and theoretical, with special emphasis on providing prospective teachers with the supplementary knowledge that supports the planning, implementation, and evaluation of physical education activity programs. A more contemporary outlook, however, suggests that the sciences not only enhance pedagogical decision-making, but also provide knowledge about human movement that can be taught directly to pupils along with the basic physical education activities.

The physical education teaching specialty segment of the physical education-teacher education curriculum includes the study of the content to be taught to the pupils and the supplementary knowledge from physical education and allied fields needed by the teacher for perspective and flexibility in teaching.

Physical Education As A Profession

The role and significance of physical education as part of a school curriculum and as a professional work force is included in the humanistic and behavioral component of professional studies. The study of physical education as a profession extends the prospective teacher's perspective beyond the classroom and school environment. It examines the nature of professionalism and the role of teachers in the various educational, research, and service activities of professional and scholarly societies in physical education. Most of all, studies in professional physical education should develop a commitment to assume full responsibility for advancing the ideals of physical education.

The physical education-teacher education curriculum provides for multidisciplinary studies that help prospective teachers become professional problem solvers in physical education. Familiarity with the unique problems of physical education may be acquired through general studies, humanistic and behavioral studies, and/or the content for the teaching specialty.

Pedagogical Physical Education

As distinguished from the physical education teaching specialty, there is a body of knowledge about the teaching and learning of human movement that should be the basis for effective teaching performance in the school physical education curriculum. This body of knowledge is called pedagogical physical education.

The specific focus of pedagogical physical education is on the planning, implementation, and evaluation of learning experiences in the movement arts and

sciences. The systematic study of teaching and learning theory is accompanied by supervised clinical, laboratory, and practicum experiences where theoretical concepts can be applied in face-to-face transactions with pupils. The pedagogical physical education component of professional studies not only reflects the experiential knowledge required of teachers and teacher educators, but it must be compatible with the rapidly emerging empirical research on (1) the teaching and learning of physical education and (2) the education of teachers for physical education and other allied professions.

Summary: The conceptual model for describing the study of the specialized, pedagogical components of the physical education-teacher education curriculum serves as a framework for the program approval process. Although the elements within and relationships among these three components may vary across institutions, all programs should strive to achieve the common goals of content mastery, professionalism and pedagogical expertise. The following guidelines (1-23) outline the minimal competencies to be acquired in the professional studies component of the physical education-teacher education curriculum and establish guidelines for the instructional content and methods designed to produce the desired competencies.

## Professional Studies

The professional studies component of the physical education-teacher education curriculum includes the study of the physical education teaching specialty, professional physical education, and pedagogical physical education.

### Physical Education Teaching Specialty

The physical education teaching specialty component includes the study of human movement and the supplementary knowledge from physical education and allied fields needed by the teacher for perspective and flexibility in teaching.

Prospective teachers of physical education at any level understand the body of knowledge underlying human movement substantially beyond that which they may be expected to teach. They are proficient in several movement forms, and they are capable of intepreting the physical education program to the many diverse communities that represent our society.

The prospective teachers of physical education demonstrate skill and knowledge regarding the following so that they can plan, implement, and evaluate physical education programs:

1. fundamental motor skills,
2. games and sports,
3. outdoor leisure pursuits,
4. dance,
5. exercise and health-related fitness.

The prospective teachers of physical education demonstrate the knowledge about human movement from the following perspectives so that they can plan, implement, and evaluate physical education programs:

6. physiological,
7. anatomical,
8. mechanical,
9. historical,
10. sociological,
11. psychological,
12. philosophical, and
13. developmental.

Physical Education As A Profession

Physical education as a profession component includes instruction in the humanistic and behavioral aspects of physical education. The prospective teachers of physical education demonstrate knowledge regarding the following so that they are capable of planning, implementing, and evaluating physical education programs.

14. the social, political and economical forces which have and are influencing the development of physical education programs,
15. the effects of physical education programs on the individual and society,
16. the philosophies of well-known physical educators of the past and present, including the philosophy of the institution's physical education-teacher education program and their relationship to one's personal philosophy of physical education,
17. the implications of philosophies of physical education on physical education programs,
18. the sociological and psychological dynamics of physical education programs, and,
19. the physical education program in the context of educational systems,
20. various curricular models with emphases on their philosophical and theoretical assumptions, aims and objective, content coverage, organizational structure, teaching/learning practices, procedures for pupil diagnosis and evaluation, and relationships with other academic fields.

Pedagogical Physical Education

The pedagogical physical education component includes the systematic study of teaching and learning theory with appropriate laboratory and clinical experiences.

The physical education-teacher education program must provide concurrent study of teaching and learning theory. Laboratory and clinical experiences must also be concurrent with this study so as to relate theory and practice. These experiences occur in a variety of educational contexts to reflect the wide diversity of our society. This study and experience commences as early as possible (at least by the sophomore year) and should continue systematically throughtout the physical education-teacher education curriculum. At least one experience occurs over an extended period of time and provides an opportunity for the prospective physical education teacher to assume major responsibility for the full range of teaching duties in a school situation under the guidance of qualified personnel from the college and cooperating school.

To achieve desired physical education outcomes, accommodate individual differences among learners, and adapt instruction to environmental constraints, the prospective teachers of physical education, with increasing autonomy, will demonstrate both skill and knowledge regarding:

21. planning the teaching and learning process,
22. implementing the teaching-learning process,
23. evaluating the teaching-learning process formatively and summatively.

IN ORDER TO MEET GUIDELINES 1-23, PHYSICAL EDUCATION-TEACHER EDUCATION PROGRAMS MUST (1) DELINEATE THOSE SPECIFIC COMPETENCIES INCLUDED IN THEIR PROGRAMS WHICH CONTRIBUTE TO THE ATTAINMENT OF THE ABOVE COMPETENCY GUIDELINES, (2) DEMONSTRATE THAT EDUCATIONAL OPPORTUNITIES EXIST TO MEET ALL COMPETENCIES, AND (3) PROVIDE EVIDENCE THAT THESE COMPETENCIES HAVE BEEN MET BY THE PROSPECTIVE PHYSICAL EDUCATION TEACHERS.

# CHAPTER 5

## RECOMMENDED GUIDELINES FOR FACULTY, STUDENTS, RESOURCES AND FACILITIES, AND EVALUATION

Guidelines for faculty, students, resources and facilities, and evaluation have been developed and are recommended as a part of the approval process.

### Faculty

The following guidelines relate to the competence, utilization, and development of faculty associated with physical education-teacher education curricula.

Competence

1. Faculty have post-masters preparation in their specialization.
2. The physical education teacher-education program coordinator possesses a terminal degree.
3. Faculty demonstrate scholarly competence in their specialization through such activities as research, scholarly and service publications, and presentations.
4. Faculty demonstrate current professional leadership through participation in professional activities.
5. Faculty teaching strategies and styles are consistent with the physical education-teacher education program.
6. Faculty have current appropriate experience in and ongoing working relationships with physical education programs within the elementary and secondary schools.
7. Faculty possess appropriate expertise in physical education specializations to ensure the attainment of the competency standards for prospective teachers.

Utilization

1. Faculty members are assigned teaching responsibilities commensurate with their experiences and expertise.
2. Cooperation among faculty members occurs within and between departments and represents diverse specializations and backgrounds.
3. Faculty are selected by their interest, expertise, and ability to provide good teaching.
4. The selection of cooperating teachers for field experiences is based on their teaching ability, knowledge about physical education, and willingness and ability to supervise the prospective physical educator in ways which are compatible with the physical education-teacher education program.
5. Faculty involved in the supervision of clinical and laboratory experiences (including the practicum) are experienced in and have continuing experience with physical education in the college, elementary and secondary school.
6. Faculty members of the physical education-teacher education program are regularly assigned contact with physical education programs in the schools.
7. Determination of full-time faculty effort and the resultant evaluation is based on:
   a. exemplary teaching,
   b. scholarly competence,
   c. professional leadership,
   d. student advisement, and
   e. college and university service.

8. The faculty effort of the physical education-teacher education program is consistent with the institutional policies for faculty in other academic units.

Faculty Development

1. The institution provides opportunities for continued faculty development in the physical education-teacher education program.
2. Faculty full time effort includes maintaining and continuing professional development.

Part-Time Faculty

1. Part-time faculty meet the competence requirements for appointment to the full-time faculty of the physical education-teacher education program.
2. Part-time faculty are employed only when they can offer a significant contribution to the physical education-teacher education program.

## Students

The following guidelines relate to the admission, retention, and evaluation of and counseling and advising for students enrolled in the physical education-teacher education curricula.

Admissions, Retention, and Evaluation

The evaluation process begins when the prospective teacher of physical education applies for admission and continues until certification is awarded. Each physical education-teacher education program applies specific published criteria for admission, retention, and certification. The criteria for evaluation are specified in the identified competencies of the physical education-teacher education program.

Counseling and Advising

The institution provides counseling and advising for students in the physical education-teacher education program. This process continues from pre-admission through placement in the profession.

Resources and Facilities

The institution provides resources which support the attainment of student competencies in the physical education-teacher education program. These resources include:

1. a library which quantitively and qualitatively supports independent study by students and faculty in physical education,
2. information storage and retrieval systems which support independent study by students and faculty in physical education,
3. appropriate audio-visual and instructional equipment and materials,
4. a laboratory which supports the study of human movement, and
5. appropriate facilities and equipment necessary for physical education instruction of prospective teachers.

Evaluation

The on-going evaluation of physical education-teacher education curriculum is provided in order to modify and improve the experiences for the attainment of specified competencies. The evaluation process includes:

1. appropriate procedures to evaluate graduates of the physical education-teacher education program,
2. information concerning the physical education-teacher education program from prospective teachers, program graduates, cooperating teachers, school administrators, scholars in physical education, and faculty from related fields and discipline, and
3. a long-term plan for program evaluation which provides mechanisms for program modification to attain the specified competencies.

SECTION TWO

MASTER'S PROGRAM LEVEL



61

| ACCREDITATION STANDARDS | INTERPRETATION OF STANDARDS |
|---|---|
| **PRECONDITIONS** | |
| The objective of accreditation is to develop and maintain an academic environment of high quality. Some standards for accreditation involve quantitative measures and others involve qualitative judgements. In all cases, the overriding concern is the achievement of high quality. | |
| All disciplines are committed to assuring some control for the quality of their programs. A given discipline must use its influence to promote high standards in all areas of study judged to be germain to the body of knowledge. If programs meet the established standards, they are accredited by the appropriate agency. | Accreditation will take into account all master's degree programs in physical education regardless where they are administered. Degrees with an emphasis in physical education, for example, must meet all standards to be accredited.* |
| Although accreditation alone does not guarantee program quality control, accredited programs are generally judged by authorities to be the single most important contributing factor to successful quality control. Since no one is better qualified to judge what constitutes quality in the discipline than the scholars themselves, it is logical that the scholars should have direct responsibility for setting accreditation standards. Therefore, it is appropriate that the National Association for Sport and Physical Education (NASPE) assume the role of leadership in establishing standards and their interpretation. | |
| Accreditation is open to universities with departments, divisions, schools, or colleges of physical education whose: | Accreditation is open to departments, divisions, schools, or colleges of physical education which are autonomous degree units reporting to the central administration in the same manner as all other autonomous degree recommending units of the university. Academic units with designations other than department, division, school, or college will be considered for accreditation only if the designation is common to all degree recommending units in the parent institution and the academic units are essentially identical to units commonly identified as departments, divisions, schools, or colleges. |
| (a) Intellectual climate encourages and supports the offering of programs of high academic quality; | |
| (b) Institution is accredited by its regional association; | |
| (c) Physical education programs have been established and in operation for such a period of time as to make possible an evaluation of their character and policies; schools shall be expected to demonstrate compliance with the Standards during the self-study year, as well as the year of visitation in the accreditation process; | In judging "...such a period of time..." factors to be examined are the following: number of years the school has been awarding degrees in physical education (under any title), how many degrees it has already awarded, the number of students currently enrolled, the trend of enrollments where present enrollment is low, continuity of curriculum, faculty, and administration of the school, and other factors deemed relevant. |
| (d) Operations are not subject to political influence, and whose general environment permits the unit to pursue acceptable objectives with a minimum of interference or diversion of effort; | |
| (e) Administrative head has jurisdiction or participating control over all academic physical education programs and physical education faculty. | "Participating control" means the ability of the administrative head of the unit holding or seeking accreditation to direct faculty recruitment, retention, resources, curriculum, budget, and admissions so all academic physical education programs offered by the unit adhere to the Standards. |
| (f) Where nontraditional programs are under consideration for accreditation and meet items (a) through (e) above, certain traditional standards may not be applicable. In those cases, the burden of proof will be on the applicant institution to offer evidence that its nontraditional programs are equal in quality to programs which are accredited. | |
| | *References to "physical education" in the Standards and their Interpretations shall be understood to include synonymous nomenclature. |

| STANDARDS | INTERPRETATIONS |
| --- | --- |
| **I. OBJECTIVES OF THE PROGRAM** | |
| The primary objective of the master's degree program shall be to provide a scholarly approach to the academic subject matter content in physical education introduced at the undergraduate level. Other appropriate objectives may be included within the mission of the unit. Evaluation for accreditation will be concerned with these objectives, and the qualitative and quantitative standards set forth below. | Every unit should clearly state its objectives in the university catalog and other literature. Appropriate objectives in addition to preparation for further graduate study, might be in such areas as preparation of teachers, administrators andpersonnel for alternative careers. If additional objectives are stated, the unit will also be evaluated on the degree to which it achieves these additional objectives. Additional objectives should be pursued only as sufficient resources are available beyond those required by the primary objectives. |
| **II. STUDENTS** | |
| A. Recruitment | |
| There should be an active program in recruitment of quality students. | Graduate assistantships and fellowships should be awarded only to those students showing the highest academic profiles and exceptional promise based on objective and subjective criteria. |
| Policies for admission should be available in writing. | Admission policies should be clearly stated in university catalogs, unit recruitment brochures, and recruitment literature for graduate assistantships/fellowships. |
| B. Admission | |
| Admission to the master's degree program is based upon completion of a quality baccalaureate degree in physical education or its equivalent. Specific content should represent the scope and depth of the discipline. | The student desiring to enter the master's degree program <u>without</u> the baccalaureate degree in physical education will remove the deficiencies by completing sequential undergraduate courses or by demonstration of necessary competencies as needed. Policies and procedures for determining deficiencies shall be provided in writing. |
| A committee should be established to screen and admit applicants for the master's degree program in physical education. | The ultimate decision on student admission should not rest exclusively with one person. This is especially true in marginal admission cases. |
| Heterogeneity of master's degree students in terms of age, sex, experience, and ethnic factors should be encouraged. | Attempts should be made to admit qualified students from out-of-state, foreign countries, and from universities with <u>quality</u> baccalaureate degree programs. |
| It is expected further that admission will be granted only to students showing high promise of success in postgraduate study in physical education. | Indicators of high promise from the following categories shall be employed in the admissions process:<br>1. Testing - candidate's performance on the GRE or on any other relevant testing device.<br>2. Previous schooling - candidate's overall grade point average prior to admission, and any other relevant measure of scholastic performance.<br>3. Recommendations - indications of candidate's potential for graduate study from qualified sources.<br>4. Interviews - candidate's potential for graduate study is assessed by interviews with individuals and/or groups representing the graduate faculty.<br>The burden of proof is on the institution to demonstrate that its combination assures a comparable quality of entering students. Students who do not meet the minimum standards as defined by the unit shall be classified as provisional, conditional, unclassified, probationary, etc. If more than 10 percent of the students admitted are in this classification, the unit shall be required to show justification. |
| C. Program Advisement | |
| There should be an organized advisement program for all master's degree students. | A graduate faculty member shall be assigned as the student's major advisor. This advisor will normally chair the student's graduate committee and direct the culminating research experience. |

| STANDARDS | INTERPRETATIONS |
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| | A written program of study should be developed early in the student's program and approved by an appropriate committee. |
| | An evaluation procedure should be established for informing the student of progress. |
| D. Evaluation and Retention | |
| Procedures should be established to measure academic performance | Systematic procedures utilizing indicators such as grade point average, qualifying examinations, written and oral comprehensive examinations should be utilized for periodic evaluation for retention. The procedure for student evaluation and retention should be written and given each student admitted to the program. |
| E. Placement | |
| A placement service should be available to graduate students while they are enrolled at the college or university as well as after they leave the institution. | |
| III. PRODUCT EVALUATION | |
| Studies on a planned basis must be a part of the evaluation process of a graduate program. The assessments should be consistent with stated program objectives. | |
| A. Assessment of program influence on performance of current students in the program shall be an ongoing process. | Procedures should be established to provide evidence that students are progressing toward meeting the unit's program objectives. |
| B. Assessment of the graduates of the program provide follow-up evaluation of the program and suggestions for revision. | Interviews with graduates of the program, interviews with employers, questionnaires, evaluation by correspondence, and informal discussions at professional meetings may be used in this assessment. |
| IV. ADMINISTRATIVE STRUCTURE | |
| A. Program Director | |
| An individual should be designated by the unit as a graduate program director | A senior member of the graduate faculty (associate or full professor) who is a recognized scholar in an area of specialization in physical education should be selected to administer the graduate program. |
| B. Graduate Committee | |
| A group of graduate faculty shall comprise the graduate committee. | This committee, comprised of junior and senior graduate faculty, shall recommend policies and procedures. Graduate students may also be members of this committee. This committee should serve in an advisory capacity to the graduate program director. Their recommendations, acted upon by the graduate program director, apply specifically to all graduate programs within the unit. |
| V. PERSONNEL | |
| The unit shall have adequate academic and nonacademic personnel resources, as measured by both qualitative and quantitative considerations. | |
| A. Personnel Classifications | |
| Personnel of the school will be considered in the following categories: | |
| 1. Full-time Personnel | |
| a. Graduate faculty | The graduate faculty in physical education must meet the criteria established by the university for graduate faculty in all units. Normally, these will consist of persons with primary responsibility for graduate instruction, research, and/or academic administration. |

| STANDARDS | INTERPRETATIONS |
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| | "Full-time" means a faculty member whose total salary from the university for the usual salary period of an academic years falls within the salary range of the unit for the academic rank held.<br><br>If a person is appointed on a full-time basis in the university and devotes part time to the unit, that portion devoted to the unit may be classified in the full-time graduate faculty category. |
| b. Supportive and service personnel | These persons are typically associated with the direction and operation of such units as the office of the administrative head, library, computing centers, and research laboratories. These persons may or may not hold appointment to an academic rank. |
| c. Technical, secretarial, and clerical personnel | These persons normally perform office and laboratory functions. |
| 2. Part-time Personnel | |
| a. Instructional personnel | This category includes persons with classroom responsibilities who are employed on a part-time basis such as adjunct professors who meet criteria for graduate faculty status established by the university. |
| b. Supportive and service personnel | This category includes personnel employed on a part-time basis such as research assistants, paper graders, and programmers. |
| c. Technical, secretarial, and clerical personnel | This category includes persons employed on a part-time basis for performing office and laboratory functions. |
| B. Personnel Qualifications | |
| In determining the qualitative and quantitative adequacy of the unit's graduate faculty and staff, various criteria will be applied. | |
| Emphasis will be placed on the qualifications and responsibilities of the graduate faculty as a whole. | |
| The graduate faculty shall possess the qualifications, experience, professional interests, and scholarly productivity essential for the successful conduct of a master's degree program in physical education. These qualities are demonstrated by: | |
| (a) The educational and professional backgrounds relating to depth and breadth of graduate education and experience. | The categories (a) through (f), listed are intended to be guidelines to major aspects of the quality of a graduate faculty. There should be a reasonable mix of attainment of the various categories in the light of the stated objectives of the school. |
| (b) Academic attainment of the terminal degree in the discipline, preferably from a university which meets the NASPE accreditation standards in physical education. | |
| (b) The extent of engagement in innovative curricula development, experimentation in teaching methods, updating course content, effective student counseling, and other meaningful efforts to improve the instructional program. | |
| (d) The qualitative level of research, writing, and publication. | |
| (e) The extent of active involvement in professional organizations plus community and university service which contribute to professional development of the individual as well as the unit. | |
| (f) The existence of plans and policies which encourage and provide a framework for continuing professional development and increasing productivity. | |
| 1. Full-time Equivalent Graduate Staff | The full-time equivalent graduate staff includes all full-time academic faculty and part-time instructional personnel as defined in the interpretations to V, A, 1, a, and V, A, 2, a. |

| STANDARDS | INTERPRETATIONS |
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| a. Overall adequacy | |
| The full-time equivalent graduate faculty shall be adequate to meet the committees of the unit. | The graduate faculty actively engaged in graduate related duties for the master's degree program in physical education shall not be less than four. The ratio of graduate faculty actively engaged in graduate related duties to the number of students taught at the graduate level shall be such as to enable the unit to fulfill adequately its total commitment. The ratio of students graduating from the physical education master's degree program in an academic year to be graduate faculty actively engaged in graduate related duties for the master's degree program shall not exceed 3:1. |
| b. Full-time graduate faculty | |
| A graduate faculty composed largely of full-time personnel is the very heart of a quality master's degree program in physical education. It is upon the full-time faculty that the major responsibility rests for the planning and implementing of a unit's program. | For accreditation the percent of graduate faculty employed on a full-time basis shall be not less than 80 percent.<br><br>As a measure of the faculty's teaching, research, applied knowledge, and overall scholarly capability, 100 percent of the full-time equivalent academic faculty generated under "a" above will possess the terminal degree in the discipline. |
| c. Distribution of graduate faculty | |
| The number and qualifications of graduate faculty and their distribution among ranks, fields, and programs shall be adequate to provide effective academic performance in all areas. | Distribution of graduate faculty among academic ranks, subject fields, day and evening programs should be such that each student or group of students has reasonable opportunity to study with faculty members who meet the qualifications that the Standards require.<br><br>Qualifications of graduate faculty should be appropriate to the specific subject areas in which their teaching, research, and service responsibilities lie. |
| d. Availability of graduate faculty in related disciplines is desirable. | Graduate faculty members who are recognized scholars in related disciplines may provide depth and breadth to the graduate experience by providing physical education students with opportunities to take courses outside the major department, to seek counsel on research projects, etc. |
| e. Total responsibility of graduate faculty members | |
| In judging the academic load, consideration should be given to the total responsibilities borne by each member of the graduate faculty. | Judgement concerning teaching, research, and administrative loads of the academic faculty shall be based upon the average for the entire academic year rather than the experience of a single term only. Members of the graduate faculty serving the master's degree program should not teach courses in excess of nine semester hours per term. The remainder of the work load would consist of research direction, thesis supervision, and other major scholarly responsibilities. |
| 2. Supportive and Service Personnel | |
| In order to operate effectively, the graduate faculty requires a staff of supportive and service personnel commensurate with the stated objectives of the unit. | |
| 3. Technical, Secretarial, Maintenance and Clerical Personnel | |
| There shall be available sufficient technical, secretarial, maintenance and clerical personnel to enable the unit to attain its stated objectives. | |
| 4. Part-time Personnel | |
| Part-time personnel in the three categories listed are supplemental to the full-time staff, and should so far as possible have similar qualifications. | |

| STANDARDS | INTERPRETATIONS |
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| **VI. CURRICULUM** | |
| Master's degree programs in physical education shall consist of three areas showing evidence of: (1) competency in methods of inquiry, (2) an area of interest culminating in some form of scholarly endeavor, and (3) breadth in the theoretical base of the discipline. | Methods of inquiry shall include a graduate course in research methodology and a graduate course in analytic methods.<br><br>An area of interst is comprised of a minimum of two graduate courses in an area selected by the student.<br><br>Scholarly endeavor implies experience such as a master's thesis, research project, comprehensive examination, etc. |
| Breadth shall consist of a minimum of three graduate courses outside the area of interest (not to include the courses of methods of inquiry) taken within the physical education unit. Breadth implies a broad theoretical base building on initial experiences acquired at the undergraduate level. | |
| The scope and quality of content of each graduate course shall be appropriate for the master's degree level. | Written course syllabi should be available for each course which reflect the breadth and depth of current knowledge in the subject area. Duration and content of such courses should be of such nature to ensure quality graduate education. Weekend workshops and courses which have as their primary emphases the acquisition of motor skills do not meet the standard. Graduate courses may not be offered for concurrent undergraduate credit. |
| A critical analysis of credit transferred to the master's degree program from other institutions should be made prior to matriculation. | Units should conform to the respective college and university regulations concerning transfer credit. Courses transferred must meet the scope and quality of graduate courses listed above. |
| **VII. LIBRARY AND LIBRARY SERVICE** | |
| A. Objective | |
| The library should be viewed as an information laboratory having the function of aiding in the communication and advancement of knowledge by providing for the acquisition and utilization of information resources. | Maximum access to and dissemination of information resources, consistent with the nature and form of materials, should be facilitated by application of contemporary technology as well as library policies, procedures, and hours. |
| B. Service | |
| The library should be organized and staffed to provide effective access, selection, user education, and retrieval services. | There should be communication between the library staff and the physical education students and faculty on a regular basis. The library staff should have the ability and opportunity to educate faculty and students to handle information effectively in a world of rapidly expanding knowledge and dynamic learning technology. |
| C. Organization and Relationships | |
| The unit's administration and faculty and the library's staff should have in operation an effective communication, planning, and acquisition mechanism to guide and build the resources collection. | The faculty is responsible for generating planned student usage of resources. The library staff must be able to help effectuate these plans through student guidance on selection, access, and through faculty liaison on reserve holdings.<br><br>The library, as an information laboratory, should provide sufficient space to accommodate: (1) all information resources, (2) retrieval equipment, (3) work space for students and faculty, (4) space for readers and other users, (5) offices and work areas for the library staff, and (6) space for special functions such as exhibits and discussions. |
| D. Resources | |
| The library staff should broadly perceive their total resources to include texts, readings, periodicals, serials, research reports, monographs, theses, pamphlets, micro-texts, visuals, audio and video tapes, and films. | Basic resources consist of recognized materials in areas of specialization and related fields. Extended collections of resources are necessary for graduate programs. They are typified by significantly greater depth in research, historical, and methodology materials as well as greater depth and breadth in periodicals and serials. Standard bibliographies as well as acquisition lists issued by established libraries can be used to guide library development. |

| STANDARDS | INTERPRETATIONS |
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| **E. Budget** | |
| **The library budget for acquisition of physical education holdings should be consistent and equitable in light of the unit's enrollment and objectives and the need for high quality service as described above.** | Initiation and maintenance of graduate programs require a significant increment in both initial and continuing budgetary support.<br><br>Budgetary planning should anticipate progress imminent in information technology. |
| **F. Evaluation** | |
| **The library staff should generate data sufficient to permit evaluation of progress toward objectives.** | Information should be designed to monitor critical aspects of library operations such as: (1) collection building and development, (2) student usage, (3) library services, and (4) user education efforts. |
| VIII. FACILITIES | |
| **The capital budget shall be sufficient to support acceptable objectives. The physical facilities, including buildings, equipment, and library, should be suitable to serve the stated objectives of the unit.** | Distribution of physical facilities and resources available to areas of specialization should be such that students and faculty have reasonable access to them. |
| **A. Offices** | |
| **Offices should provide sufficient privacy and space to allow the faculty to conduct their responsibilities.** | |
| **B. Classrooms** | |
| **General and specific purpose classrooms should be appropriate in size and design to the courses offered.** | |
| **C. Laboratory Space and Equipment** | |
| **Laboratories and equipment should be appropriate in size, design and quantity for the courses offered and for specialized activities associated with faculty and student research.** | The mission and objectives of the program shall dictate the types of laboratories and the specialized equipment required. |
| **D. Computer Facilities** | |
| **Computer facilities should be available for specialized activities in course work or research.** | |
| IX. FINANCIAL RESOURCES | |
| **The operational budget shall be sufficient to support the instructional program and research.** | The operational budget shall include the purchase and maintenance of supplies and equipment; time and financial support for professional meetings, faculty development, computer services, etc.<br><br>Financial resources should be available for instructional and research activities needed for quality graduate programs including research exploration, visits to funding agencies to discuss research ideas, use of consultants to help develop research proposals, pilot studies to encourage research and other creative activities, faculty research which may not be of interest to funding agencies, and funds to disseminate significant research findings. |
| **The personnel budget shall be sufficient to support the instructional program and research.** | The personnel budget shall include salaries for full-time graduate faculty comparable to salaries paid faculty of like ranks and responsibility elsewhere within the institution. The budget should provide for sabbatical leaves and leaves of absence for purposes of self-improvement.<br><br>The full-time technical, secretarial, clerical, and supportive personnel salaries shall be comparable to salaries paid within other units of the institution. |
| X. EDUCATIONAL INNOVATION AND TECHNOLOGY | |
| **Units shall examine contemporary learning approaches and technologies and adapt them, as may be appropriate, to serve their educational objectives. Units are encouraged to develop and test new learning approaches and technologies and disseminate their results.** | While under development, new and innovative areas of interest may be excluded from evaluation by the preceding standards. However, annual progress reports must include information regarding the status of the program. Once established, the areas of interest must meet the existing standards. |

| STANDARDS | INTERPRETATIONS |
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| **XI. MAINTENANCE OF ACCREDITATION** | |
| **A. Adherence to Standards** | |
| **A member unit being accredited is expected to adhere to existing Standards.** | A unit which is accredited on the basis of a given program or set of programs and subsequently adds or drops programs at the master's degree level will have its continued accreditation evaluated on the basis of its current program. |

SECTION THREE

DOCTORAL PROGRAM LEVEL

| ACCREDITATION STANDARDS | INTERPRETATION OF STANDARDS |
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| **PRECONDITIONS** | |
| **The objective of accreditation is to develop and maintain an academic environment of high quality. Some standards for accreditation involve quantitative measures and others involve qualitative judgements. In all cases, the overriding concern is the achievement of high quality.** | |
| **Accreditation may be at the undergraduate, masters, or doctoral level. Accreditation will not be granted at the doctoral level unless the master's program meets all accreditation requirements.** | Accreditation will take into account all doctoral programs in physical education regardless where they are administered. Degrees with an emphasis in physical education, for example, must meet all standards to be accredited.* |
| **All disciplines are committed to assuming some control for the quality of their programs. A given discipline must use its influence to promote high standards in all areas of study judged to be germane to the body of knowledge. If programs meet the established standards, they are accredited by the appropriate agency.** | |
| **Although accreditation alone does not guarantee program quality control, accredited programs are generally judged by authorities to be the single most important contributing factor to successful quality control. Since no one is better qualified to judge what constitutes quality in the discipline than the scholars themselves, it is logical that the scholars should have direct responsibility for setting accreditation standards. Therefore, it is appropriate that the National Association for Sport and Physical Education (NASPE) assume the role of leadership in establishing standards and their interpretation.** | |
| **Accreditation is open to universities with departments, divisions, schools, or colleges of physical education whose:** | Accreditation is open to departments, divisions, schools, or colleges of physical education which are autonomous degree units reporting to the central administration in the same manner as all other autonomous degree recommending units of the university. Academic units with designations other than department, division, school, or college will be considered for accreditation only if the designation is common to all degree recommending units in the parent institution and the academic units are essentially identical to units commonly identified as departments, divisions, schools, or colleges. |
| **(a) Intellectual climate encourages and supports the offering of programs of high academic quality;** | |
| **(b) Institution is accredited by its regional association;** | |
| **(c) Physical education programs have been established and in operation for such a period of time as to make possible an evaluation of their character and policies; schools shall be expected to demonstrate compliance with the Standards during the self-study year, as well as the year of visitation in the accreditation process;** | In judging "...such a period of time..." factors to be examined are the following: number of years the school has been awarding degrees in physical education (under any title), how many degrees it has already awarded, the number of students currently enrolled, the trend of enrollments where present enrollment is low, continuity of curriculum, faculty, and administration of the school, and other factors deemed relevant. |
| **(d) Operations are not subject to political influence, and whose general environment permits the unit to pursue acceptable objectives with a minimum of interference or diversion of effort;** | |
| **(e) Administrative head has jurisdiction or participating control over all academic physical education programs and physical education faculty.** | "Participating control" means the ability of the administrative head of the unit holding or seeking accreditation to direct faculty recruitment, retention, resources, curriculum, budget, and admissions so all academic physical education programs offered by the unit adhere to the Standards. |
| **(f) Where nontraditional programs are under consideration for accreditation and meet items (a) through (e) above, certain traditional standards may not be applicable. In those cases, the burden of proof will be on the applicant institution to offer evidence that its nontraditional programs are equal in quality to programs which are accredited.** | |

*References to "physical education" in the Standards and their Interpretations shall be understood to include synonymous nomenclature.

| STANDARDS | INTERPRETATIONS |
|---|---|
| **I. OBJECTIVES OF THE PROGRAM** | |
| The primary objective of the program shall be to develop scholars in physical education. Other appropriate objectives may be included within the mission of the unit. Evaluation for accreditation will be concerned with these objectives, the degree of achievement of these objectives, and the qualitative and quantitative standards set forth below. | Every unit should clearly state its objectives in the university catalog and other literature. Appropriate objectives might be in such areas as preparation of researchers, teachers, administrators and personnel for alternative careers. If additional objectives are stated, the unit will also be evaluated on the degree to which it achieves these additional objectives. Additional objectives should be pursued only as sufficient resources are available beyond those required by the primary objectives. |
| **II. STUDENTS** | |
| A. Recruitment | |
| There should be an active program in recruitment of quality students. | Graduate assistantships and fellowships should be awarded only to those students showing the highest academic profiles and exceptional promise based on objective and subjective criteria. |
| Policies for admission should be available in writing. | Admission policies should be clearly stated in university catalogs, unit recruitment brochures, and recruitment literature for graduate assistantships/fellowships. |
| B. Admission | |
| Admission to the doctoral program is based upon completion of a degree in physical education or its equivalent. Specific content should represent the scope and depth of the discipline. | The student desiring to enter the doctoral program <u>without</u> a prior degree in physical education will remove the deficiencies by completing sequential undergraduate and graduate courses or by demonstration of necessary competencies as needed. Policies and procedures for determining deficiencies shall be provided in writing. |
| A committee should be established to screen and admit applicants for the doctoral program in physical education. | The ultimate decision on student admission should not rest exclusively with one person. This is especially true in marginal admission cases. |
| Heterogeneity of doctoral students in terms of age, sex, experience, and ethnic factors should be encouraged. | Attempts should be made to admit qualified students from out-of-state, foreign countries, and other <u>quality</u> masters degree programs. |
| It is expected further that admission will be granted only to students showing high promise of success in postgraduate study in physical education. The criteria of performance should be significantly higher than those for admission to the masters degree program. | Indicators of "high promise" from the following categories shall be employed in the admissions process:<br>1. Testing - candidate's performance on the GRE or on any other relevant testing device.<br>2. Previous schooling - candidate's overall grade point average prior to doctoral admission, and any other relevant measure of scholastic performance.<br>3. Recommendations - indications of candidate's potential for doctoral study from qualified sources.<br>4. Interviews - candidate's potential for graduate study is assessed by interviews with individuals and/or groups representing the graduate faculty.<br>The unit shall provide an indicator to be used in making decisions on admission to the Doctoral Program. When the indicators are different from that suggested in the preceding paragraph, the burden of proof is on the unit to demonstrate that its combination of indicators assures a comparable quality of entering students.<br>The admission of students who have not met the indicators of high promise must be identified, justified, and procedures for an ongoing review must be specified in writing. |

| STANDARDS | INTERPRETATIONS |
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| C. Program Advisement | |
| There should be an organized advisement program for all doctoral students. | A graduate faculty member in the student's area of specialization shall be assigned as the major advisor. This advisor will normally chair the student's doctoral committee and direct the dissertation.<br><br>A written program of study should be developed early in the student's program and approved by an appropriate committee.<br><br>An evaluation procedure should be established for informing the student of his progress. |
| D. Evaluation and Retention | |
| Procedures should be established to measure academic performance. | Systematic procedures utilizing indicators such as grade point average, qualifying examinations, written and oral comprehensive examinations should be utilized for periodic evaluation for retention. The procedure for student evaluation and retention should be written and given to each student admitted to the program. |
| E. Placement | |
| A placement service should be available to graduate students while they are enrolled at the college or university as well as after they leave the institution. | |
| III. PRODUCT EVALUATION | |
| Studies on a planned basis must be a part of the evaluation process of a graduate program. The assessments should be consistent with stated program objectives. | |
| A. Assessment of program influence on performance of current students in the program shall be an ongoing process. | Procedures should be established to provide evidence that students are progressing toward meeting the units program objectives. |
| B. Assessment of graduates of the program shall provide follow-up evaluation of the program and suggestions for revision. | Interviews with graduates of the program, interviews with employees, questionnaires, evaluation by correspondence, and informal discussions at professional meetings may be used in this assessment. |
| IV. ADMINISTRATIVE STRUCTURE | |
| A. Program Director | |
| An individual should be designated by the unit as a graduate program director | A senior member of the graduate faculty (associate or full professor) who is a recognized scholar in an area of specialization in physical education should be selected to administer the graduate program. |
| B. Graduate Committee | |
| A group of graduate faculty shall comprise the graduate committee. | This committee, comprised of junior and senior graduate faculty representing the areas of specialization, shall recommend policies and procedures. Graduate students may also be members of this committee. This committee should serve in an advisory capacity to the graduate program director. Their recommendations, acted upon by the graduate program director, apply specifically to all graduate programs within the unit. |
| V. PERSONNEL | |
| The unit shall have adequate academic and nonacademic personnel resources, as measured by both qualitative and quantitative considerations. | |
| A. Personnel Classifications | |
| Personnel of the school will be considered in the following categories: | |
| 1. Full-time Personnel | |
| a. Graduate faculty | The graduate faculty in physical education must meet the criteria established by the university for graduate faculty in all units. Normally, these will consist of persons with primary responsibility for graduate instruction, research, and/or academic administration. |

| STANDARDS | INTERPRETATIONS |
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| | "Full-time" means a faculty member whose total salary from the university for the usual salary period of an academic year falls within the salary range of the unit for the academic rank held.<br><br>If a person is appointed on a full-time basis in the university and devotes part time to the unit, that portion devoted to the unit may be classified in the full-time graduate faculty category. |
| b. Supportive and service personnel | These persons are typically associated with the direction and operation of such units as the office of the administrative head, library, computing centers, and research laboratories. These persons may or may not hold appointment to an academic rank. |
| c. Technical, secretarial, and clerical personnel | These persons normally perform office and laboratory functions. |
| 2. Part-time Personnel | |
| a. Instructional personnel | This category includes persons with classroom responsibilities who are employed on a part-time basis such as adjunct professors who meet criteria for graduate faculty status established by the university. |
| b. Supportive and service personnel | This category includes personnel employed on a part-time basis such as research assistants, paper graders, and programmers. |
| c. Technical, secretarial, and clerical personnel | This category includes persons employed on a part-time basis for performing office and laboratory functions. |
| B. Personnel qualifications | |
| In determining the qualitative and quantitative adequacy of the unit's graduate faculty and staff, various criteria will be applied. | |
| Emphasis will be placed on the qualification and responsibilities of the graduate faculty as a whole. | |
| The graduate faculty shall possess the qualifications, experience, professional interests, and scholarly productivity essential for the successful conduct of a doctoral program in physical education. These qualities are demonstrated by: | |
| (a) The educational and professional backgrounds relating to depth and breadth of graduate education and experience. | The categories (a) through (f), listed are intended to be guidelines to major aspects of the quality of a graduate faculty. There should be a reasonable mix of attainment of the various categories in the light of the stated objectives of the school. |
| (b) Academic attainment of the terminal degree in the discipline, preferably from a unviversity which meets the NASPE accreditation standards in physical education. | |
| (c) The extent of engagement in innovative curricula development, experimentation in teaching methods, updating course content, effective student counseling, and other meaningful efforts to improve the instructional program. | |
| (d) The qualitative level of research, writing and publication. | |
| (e) The extent of active involvement in professional organizations and community and university service which contribute to professional development. | |
| (f) The existence of plans and policies which encourage and provide a framework for continuing professional development and increasing productivity. | |
| 1. Full-time Graduate Staff | The full-time equivalent graduate staff includes all full-time academic faculty and part-time instructional personnel as defined in the interpretations to V, A, 1, a, and V, A, 2, a. |

| STANDARDS | INTERPRETATIONS |
| --- | --- |
| **The full-time equivalent graduate faculty shall meet certain minimum criteria.** | |
| a. Overall adequacy | |
| The full-time equivalent graduate faculty shall be adequate to meet the commitments of the unit. | The ratio of graduate faculty actively engaged in graduate related duties to the number of students taught at the graduate level shall enable the unit to fulfill its total commitment. In general, the graduate faculty shall not be less than <u>five</u> when one specialized area is offered in the discipline. For every additional area of specialization, a minimum of <u>two</u> additional graduate faculty actively engaged in graduate related duties in that specialization shall be required. Of the two graduate faculty for every area of specialization, at least one shall be a recognized scholar in the area. |
| b. Full-time graduate faculty | |
| A graduate faculty composed largely of full-time personnel is the very heart of a quality doctoral program in physical education. It is upon the full-time faculty that the major responsibility rests for the planning and implementing of a unit's program. | For accreditation, the percent of graduate faculty employed on a full-time basis shall not be not less than 80 percent.<br><br>A measure of the faculty's teaching, research, applied knowledge, and overall scholarly capacity, 100 percent of the full-time equivalent academic faculty generated under "a" above will possess the terminal degree in the discipline. |
| c. Distribution of graduate faculty | |
| The number and qualifications of graduate faculty and their distribution among ranks, fields, and programs shall be adequate to provide effective academic performance in all areas. | Distribution of graduate faculty among academic ranks, subject fields, day and evening programs should be such that each student or group of students has reasonable opportunity to study with faculty members who meet the qualifications that the Standards require.<br><br>Qualifications of graduate faculty should be appropriate to the specific subject areas in which their teaching, research and service responsibilities lie. |
| d. Availability of graduate faculty in related disciplines. | |
| The number and qualification of graduate faculty in related disciplines such as physiology, medicine, psychology, sociology, education, and history shall be adequate to support the areas of specialization offered in physical education. | A minimum of one graduate faculty member who is a recognized scholar in a related discipline shall be available for support in each area of specialization. |
| e. Total responsibilities of graduate faculty members | |
| In judging the academic load, consideration should be given to the total responsibilities borne by each member of the graduate faculty. | Judgment concerning teaching, research, and administrative loads of the academic faculty shall be based upon the average for the entire academic year rather than the experience of a single term only. Members of the graduate faculty should not teach courses in excess of <u>six semester hours</u> per term. The remainder of the work load would consist of research direction, dissertation/thesis supervision, and other major scholarly responsibilities. |
| 2. Supportive and Service Personnel | |
| In order to operate effectively, the graduate faculty requires a staff of supportive and service personnel commensurate with the stated objectives of the unit. | |
| 3. Technical, Secretarial, Maintenance and Clerical Personnel | |
| There shall be available sufficient technical, secretarial, maintenance and clerical personnel to enable the unit to attain its stated objectives. | |
| 4. Part-time Personnel | |
| Part-time personnel in the three categories listed are supplemental to the full-time staff, and should so far as possible have similar qualifications. | |

| STANDARDS | INTERPRETATIONS |
|---|---|
| **VI. CURRICULUM** | |
| **Doctoral programs in physical education shall be comprised of a minimum of four parts including:** | |
| **(1) High attainment of scholarship in an area of specialization commensurate with the ability to conduct individual research and study, teach, and administer programs in the area;** | An area of specialization shall consist of a minimum of four graduate courses in the subject matter area (not to include general courses in research) taken within the physical education unit. |
| **(2) Competency in an area within the department to support the areas of research interest;** | An area of support shall consist of a minimum of two graduate courses in a second subject matter area (not to include general courses in research) taken within the physical education unit. |
| **(3) Competency in related studies outside the department essential to the attainment of high scholarship in the chosen area of specialization; and** | Related studies shall consist of a logical progression of graduate courses from outside the unit which support the area of specialization and/or support area. |
| **(4) Competency in evaluating and conducting scientific and scholarly investigations culminating in the doctoral dissertation.** | Research competency shall include demonstrating and understanding of: (1) the research processes in physical education; (2) the quantitative and qualitative methods of analysis employed in physical education research; and (3) the principles underlying the statistical aspects of experimental and non-experimental designs employed in physical education research. A doctoral dissertation in the area of specialization shall be required as a culminating experience demonstrating research competency |
| **The scope and quality of content of each graduate course shall be appropriate for the doctoral level.** | Written course syllabi should be available for each course which reflect the breadth and depth of current knowledge in the subject area. Graduate courses may not be offered for concurrent undergraduate credit. |
| **A critical analysis of credit transferred to the doctoral program from other institutions should be made prior to matriculation.** | A majority of work in the area of specialization and support area shall be taken at the institution granting the doctoral degree. |
| **A unit shall establish and maintain a residency requirement for the doctoral degree.** | In the absence of a university residence requirement, the unit should establish a residence requirement for its doctoral students. |
| **VII. LIBRARY AND LIBRARY SERVICE** | |
| **A. Objective** | |
| **The library should be viewed as an information laboratory having the function of aiding in the communication and advancement of knowledge by providing for the acquisition and utilization of information resources.** | Maximum access to an dissemination of information resources consistent with the nature and form of materials should be facilitated by application of contemporary technology as well as library policies, procedures, and hours. |
| **B. Service** | |
| **The library should be organized and staffed to provide effective access, selection, user education, and retrieval services.** | There should be communication between the library staff and the physical education students and faculty on a regular basis. The library staff should have the ability and opportunity to educate faculty and students to handle information effectively in a world of rapidly expanding knowledge and dynamic learning technology. |
| **C. Organization and Relationships** | |
| **The unit's administration and faculty and the library's staff should have in operation an effective communication, planning, and acquisition mechanism to guide and build the resources collection.** | The faculty is responsible for generating planned student usage of resources. The library staff must be able to help effectuate these plans through student guidance on selection, access, and through faculty liaison on reserve holdings.<br><br>The library, as an information laboratory, should provide sufficient space to accommodate: (1) all information resources, (2) retrieval equipment, (3) work space for students and faculty, (4) space for readers and other users, (5) offices and work areas for the library staff, and (6) space for special functions such as exhibits and discussions. |

| STANDARDS | INTERPRETATIONS |
| --- | --- |
| D. Resources | |
| The library staff should broadly perceive their total resources to include texts, readings, periodicals, serials, research reports, monographs, theses, pamphlets, microtexts, visuals, audio and video tapes, and films. | Basic resources consist of recognized materials in areas of specialization and related fields. Extended collections of resources are necessary for graduate programs. They are typified by significantly greater depth in research, historical, and methodological materials as well as greater depth and breadth in periodicals and serials. Standard bibliographies as well as acquisition lists issued by established libraries can be used to guide library development. |
| E. Budget | |
| The library budget for acquisition of physical education holdings should be consistent and equitable in light of the unit's enrollment and objectives and the need for high quality service as described above. | Initiation and maintenance of graduate programs require a significant increment in both initial and continuing budgetary support.<br><br>Budgetary planning should anticipate progress imminent in information technology. |
| F. Evaluation | |
| The library staff should generate data sufficient to permit evaluation of progress toward objectives. | Information should be designed to monitor critical aspects of library operations such as: (1) collection building and development, (2) student usage, (3) library services, and (4) user education efforts. |
| III. FACILITIES | |
| The capital budget shall be sufficient to support acceptable objectives. The physical facilities, including buildings, equipment, and library, should be suitable to serve the stated objectives of the unit. | Distribution of physical facilities and resources available to areas of specialization should be such that students and faculty have reasonable access to them. |
| A. Offices | |
| Offices should provide sufficient privacy and space to allow the faculty to conduct their responsibilities. | |
| B. Classrooms | |
| General and specific purpose classrooms should be appropriate in size and design to the courses offered. | |
| C. Laboratory Space and Equipment | |
| Laboratories and equipment should be appropriate in size, design and quantity for the courses offered and for specialized activities associated with faculty and student research. | The mission and objectives of the program shall dictate the types of laboratories and the specialized equipment required. |
| D. Computer Facilities | |
| Computer facilities should be available for specialized activities in course work or research. | |
| IX. FINANCIAL RESOURCES | |
| The operational budget shall be sufficient to support the instructional program and research. | The operational budget shall include the purchase and maintenance of supplies and equipment, time and financial support for professional meetings, faculty development, computer services, etc.<br><br>Financial resources should be available for instructional and research activities needed for quality graduate programs including research exploration, visits to funding agencies to discuss research ideas, use of consultants or help develop research proposals, pilot studies to encourage research and other creative activities, faculty research which may not be of interest to funding agencies, and funds to disseminate significant research findings. |
| The personnel budget shall be sufficient to support the instructional program and research. | The personnel budget shall include salaries for full-time graduate faculty comparable to salaries paid faculty of like ranks and responsibilities elsewhere within the institution. The budget should provide for sabbatical leaves and leaves of absence for purposes of self-improvement. |

| STANDARDS | INTERPRETATIONS |
| --- | --- |
| | The full-time technical, secretarial, clerical, and supportive personnel salaries shall be comparable to salaries paid within other units of the institution. |
| X. EDUCATIONAL INNOVATION AND TECHNOLOGY | |
| Units shall examine contemporary learning approaches and technologies and adapt them, as may be appropriate, to serve their educational objectives. Units are encouraged to develop and test new learning approaches and technologies and disseminate their results. | While under development new and innovative areas of specialization may be excluded from evaluation by the preceding standards. However, annual progress reports must include information regarding the status of the program. Once established, the areas of specialization must meet the existing standards. |
| XI. MAINTENANCE OF ACCREDITATION | |
| A. Adherence to Standards | |
| A member unit being accredited is expected to adhere to existing Standards. | A unit which is accredited on the basis of a given program or set of programs and subsequently adds or drops programs at the doctoral level will have its continued accredication evaluated on the basis of its current program. |
| B. Periodic Surveys | |
| Periodic surveys shall be undertaken to evaluate compliance with standards. | |
| C. Reporting of Changes | |
| Marked or significant changes in objectives, including proposed experimental changes which may bear on adherence to standards, shall be reported at the time they are implemented within the unit. | All new doctoral programs, whether additions to or major revisions of existing programs, are to be reported prior to implementation.<br><br>Proposals for experimental programs that may involve departures from Standards are to include a full description, including the design of the experiment and the plan for evaluating and reporting results. |

# SECTION FOUR

# MATRICES FOR ADVANCED PROGRAMS

## CHAPTER 8

## INSTRUCTION FOR COMPLETING THE MATRIX FOR ADVANCED PROGRAMS

Use the following matrices to describe the requirements of the program(s) that comply with AAHPERD's guidelines. The evidence should substantiate and describe the degree to which your program(s) meets each guideline. If the space provided is not sufficient, attach supplementary pages.

Submit a separate folio for the master's and doctoral programs in physical education. Please include a graduate catalog. Each folio should include a cover page, overview and scope, objectives, course descriptions, and the appropriate matrix found on the following pages.

## Guidelines and Matrix

### MASTER'S DEGREE PROGRAMS IN PHYSICAL EDUCATION

| Guideline | Courses and/or experiences that fulfill the guideline |
|---|---|
| **1. Master's degree programs in physical education shall consist of three areas showing evidence of (a) competency in methods of inquiry, (b) one or more areas of interest culminating in some form of scholarly endeavor, and (c) breadth in the theoretical base of the discipline.** | |
| 1.1 Methods of inquiry shall include a graduate course in research methodology. | |
| 1.2 Methods of inquiry shall include a graduate course in methods of analyzing research data. | |
| 1.3 An area of interest is comprised of a minimum of two graduate courses in a content area selected by the student. | |
| 1.4 Scholarly endeavor implies experience such as a master's thesis, research project, comprehensive examination, etc. | |

OVER

| Guideline | Courses and/or experiences that fulfill the guideline |
|---|---|
| 2. Breadth shall consist of a minimum of three graduate courses outside the area of interest (not to include the courses of method of inquiry) taken within the physical education unit. Breadth implies a broad theoretical base building on initial experiences acquired at the undergraduate level. The scope and quality of content of each graduate course shall be appropriate for the master's degree level. (Weekend workshops and courses which have as their primary emphases the acquisition of motor skills do not meet the standard. Graduate courses may not be offered for concurrent undergraduate credit.) | |
| 3. The scope and quality of content of each graduate course shall be appropriate for the master's level. | |
| 4. A critical analysis of credit transferred to the master's program from other institutions should be made prior to matriculation. (A majority of work in the area of specialization and support area shall be taken at the institution granting the master's degree). | |

Guidelines and Matrix

DOCTORAL PROGRAMS IN PHYSICAL EDUCATION

| Guideline | Courses and/or experiences that fulfill the guideline |
|---|---|
| 1. Doctoral programs in physical education shall require high attainment of scholarship in an area of specialization commesurate with the ability to conduct individual research and study, teach, and administer programs in the area. | |
| 1.1 An area of specialization shall consist of a minimum of four graduate courses in the subject matter area (not to include general courses in research) taken <u>within</u> the physical education unit. | |
| 2. Doctoral programs in physical education shall require competency in an area within the department to support the areas of research interest. | |
| 2.1 An area of support shall consist of a minimum of two graduate courses in a second subject matter area (not to include general courses in research) taken <u>within</u> the physical education unit. | |
| 3. Doctoral programs in physical education shall require competency in related studies <u>outside</u> the department essential to the attainment of high scholarship in the chosen area of specialization. (Related studies consist of a logical progression of graduate courses <u>outside</u> the physical education unit. These courses must directly support the area of specialization.) | |
| 4. Doctoral programs in physical education require competency in evaluating and conducting scientific and scholarly investigations culminating in the doctoral dissertation. | |

OVER

| Guideline | Courses and/or experiences that fulfill the guideline |
|---|---|
| 4.1 Research competency shall include demonstrating and understanding of the research processes in physical education.<br><br>4.2 Research competency shall include demonstrating and understanding of the quantitative and qualitative methods of analysis employed in physical education research.<br><br>4.3 Research competency shall include demonstrating and understanding of the principles underlying the statistical aspects of experimental and non-experimental designs employed in physical education research.<br><br>4.4 A doctoral dissertation in the area of specialization shall be required as a culminating experience demonstrating research competency. | |
| 5. The scope and quality of content of each graduate course shall be appropriate for the doctoral level. (Graduate courses may <u>not</u> be offered for concurrent undergraduate credit.) | |
| 6. A critical analysis of credit transferred to the doctoral program from other institutions should be made prior to matriculation. (A majority of work in the area of specialization and support area shall be taken at the institution granting the doctoral degree.) | |
| 7. A unit shall establish and maintain a residency requirement for the doctoral degree. | |

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PART B

Academy Curricular Suggestions

# GUIDELINES AND STANDARDS FOR UNDERGRADUATE EXERCISE PHYSIOLOGY

## I. INTRODUCTION

Human physiology is basically the study of how the body functions. Particular interest is centered on how normal function (homeostasis) is altered, and subsequently restored, in response to various forms of stress. Vigorous exercise is one of the most severe stresses that the human organism encounters. Within a few seconds, exercise can severely disrupt homeostatic mechanisms. The stress of exercise may also be magnified by environmental factors that create additional homeostatic problems.

Every form of physical activity requires a physiological response (homeostatic adjustment), and since physical activity is the common element in the accomplishment of the objectives of physical education, it is imperative that future professionals have adequate understanding of the physiological responses to exercise. Such understanding will provide the student with a means to 1) analyze exercise and sports; 2) assess the individual's responses to sport and exercise; 3) evaluate claims for and against various forms of exercise; 4) plan programs for the optimal enhancement of human well-being; and 5) communicate program concepts to the necessary public (school administrators, parents, townspeople, medical profession). Accomplishment of the above implies both an understanding of the theoretical and abstract nature of the subject area and the ability to make applications in professional situations. Adequate professional applications require a sound knowledge of physiological principles.

Exercise physiology is (thus) an essential element of study for anyone supervising human beings engaged in motor activities and should be a required part of the undergraduate curriculum for all students of human movement regardless of professional or vocational direction. This recommendation is not new. Exercise physiology has long been recognized as a critical aspect of the adequate undergraduate preparation of physical educators, and the recommendation has been forwarded from national conferences on professional preparation.[1,2] In fact, emphasis on exercise physiology as a vitally important part of undergraduate professional preparation dates back nearly one hundred years to the earliest of such programs at Stanford and Harvard Universities.[3] With the contemporary emphasis on maximum performance in sports, physical fitness for all ages, and exercise as preventive medicine, adequate understanding of physiological concepts related to exercise is more important that ever.

Nationally approved guidelines and standards for an introductory course in exercise physiology follow. Prerequisite knowledge necessary for undertaking the study of exercise physiology and the minimum cognitive abilities to be achieved through such study are stated in terms of student competencies. The development of these competencies may assume a variety of patterns depending upon differences in institutional curricula. For instance, some of the competencies relating to physical fitness and/or body composition may be developed in a course on measurement and evaluation. However, regardless of course variations, it is very unlikely that an adequate level of overall competency can be achieved in less that four semester hours of credit in an exercise physiology course or courses, including at least two hours of laboratory per week. All programs should attempt to develop a high percentage of the listed competencies (90% or more). A significant portion of the total time allotted for the basic required course content in exercise physiology should be devoted to the practical application of physiological concepts and principles to physical education and sport (e.g. Section III, G. and H.).

## II. PREREQUISITES (ENTERING MINIMUM COMPETENCIES)[a]

### A. ANATOMY AND PHYSIOLOGY

The student should be able to:

1. name the parts and describe the general organization of the nervous system.
2. distinguish among the types of neurons according to function; draw and label a neuron.
3. define and describe the motor unit.
4. name and locate muscles and muscle groups important in human motion and identify their primary actions.
5. name and locate the individual bones and articulations of the human skeleton.
6. describe basic muscle structure including organization of fibers, connective tissue, and the spatial relationship of muscles to joints.
7. give a general description of the sliding filament model of muscle contraction.
8. describe the structure of the respiratory passageways and the lungs.
9. name and locate the various parts of the human systemic and pulmonary circulations.
10. describe the structure and function of arteries, veins, and capillaries.
11. name and locate the parts of the human heart, including the nodes, chambers, valves, and blood vessels entering and leaving it.
12. describe the structure and function of arteries, veins, and capillaries.
13. define cardiac output, heart rate, and stroke volume.
14. identify and describe the basic segments of the cardiac cycle.
15. define and explain the function of blood pressure.
16. describe and explain the principles of gaseous exchange between the blood and the lung aveoli.
17. identify the fluid compartments of the body.
18. describe and explain the basic structure and function of the kidney.
19. explain the gross structure and function of adenosine-triposphate and phosphocreatine.

20. describe the gross structure of carbohydrates and lipids.

21. identify the basic components of the blood and explain their functions.

22. demonstrate a general understanding of aerobic and anaerobic metabolism.

B. MATHEMATICS[b]

The student should be able to:

1. demonstrate a knowledge of order of precedence where series of arithmetic operations are involved and complete such series where they involve addition, subtraction, multiplication, division, radical signs, parentheses, or brackets.

2. perform arithmetic operations involving fractions, decimals, and/or percentages.

3. work and solve problems when data appear in the form of proportions, formulae, and/or equations.

4. solve simple linear algebraic equations.

5. solve word problems requiring the use of simple proportions or linear equations.

6. demonstrate competency both in general graphing procedures, and in the interpretation of graphs.

7. use the metric system of measurement and make conversions between it and the English system.

C. CHEMISTRY AND PHYSICS

Courses in both chemistry and physics are highly desirable as prerequisites but are not necessarily considered entering minimum competencies. However, students will find it quite helpful if they are familiar with basic atomic theory; chemical symbols, formulae, equations, and calculations; the gas laws; acids; bases and salts; properties of matter heat; mechanics; and electricity.

## III. COURSE COGNITIVE ABILITIES (MINIMUM EXIT COMPETENCIES)[c]

A. METABOLIC FUNDAMENTALS

The student should be able to:

1. define calorie and kilocalorie (kcal).

2. describe ATP and creatine phosphate and the role they play in cell metabolism during exercise.

3. identify and describe the sources of energy utilized by the muscle in anaerobic metabolic processes.

4. identify and describe the sources of energy utilized by the muscle in aerobic metabolism.

5. define glycolysis, indicate its end products and energy yield, and describe its role in anaerobic and aerobic metabolism.

6. describe the formation of lactic acid in glycolysis; explain its usefulness in intensive exercise.

7. define and explain the process of oxidative phosphorylation in the muscle cell.

8. list the caloric value of the major foodstuffs and their energy yield per unit of $O_2$.

9. calculate and interpret a respiratory exchange ratio (R) when presented with data on $O_2$ consumption and $CO_2$ production.

10. define and explain the functions of monosaccharides and free fatty acids in muscle metabolism.

11. define and explain the concept of anaerobic and aerobic power.

12. define and explain oxygen consumption (both steady-state and maximal $O_2$ consumption).

13. draw and label a classic oxygen deficit - oxygen consumption - oxygen debt curve for (a) steady state work and (b) nonsteady state work (explain the various parts of the curves).

14. explain the role of myoglobin in muscle metabolism.

15. explain the alactic and lactic oxygen debts.

16. define calorimetry and explain several types of calorimetry used in nutrition and exercise science.

17. explain why the ability to do long-term steady state work depends upon aerobic power.

18. identify and explain sex and age differences in the expression of aerobic and anaerobic power.

19. classify the relative physical working capacity of various individuals from knowledge of their maximum oxygen consumptions.

20. compare and contrast the relative contribution of anaerobic and aerobic energy sources in maximal performances of various durations.

21. relate the depletion of creatine phosphate, plasma glucose, and muscle glycogen to the specificity of fatigue.

22. use the basic physical formulae and calculate both work and power from situations involving the stepping bench and the bicycle ergometer.

23. estimate energy expenditure and/or equivalent work done from oxygen consumption data.

24. estimate oxygen consumption from calculations of work done on an ergometer when mechanical efficiency is known.

25. calculate the mechanical efficiency of work when given data on work done and energy expended.

26. convert oxygen consumption measures from liters $\cdot min^{-1}$ to $ml \cdot kg^{-1} \cdot min^{-1}$ and explain why the conversion is made.

27. calculate oxygen consumption from expired volumes of air, $O_2$ and $C_{O2}$ when given the environmental temperature and barometric pressure.

    (If equipment is insufficient the instructor should at least set up a demonstration and explanation.)

28. estimate maximum oxygen consumption from steady state values of heart rate and workload.

29. demonstrate a familiarity with common metabolic measuring instruments such as Douglas bags, meteorological balloons, gas analyzers, ergometers, barometers, spirometers, and respiratory valves.

B. NEUROMUSCULAR PHYSIOLOGY OF EXERCISE

The student should be able to:

1. describe the macro- and microstructure of the muscle, beginning with whole muscle, and progressing to the muscle cell, the myofibril, and finally, the sarcomere.

2. draw and label a sarcomere and describe the function of the various proteins making up its structure.

3. describe, in detail, the sequence of electrical, chemical, and mechanical depolarization of the sarcolemma and its repolarization.

4. identify and describe the function of the basic fiber types found in most skeletal muscles.

5. relate the adaptations the muscle makes during various types of training to the fiber types within the muscle.

6. differentiate between static (isometric) and dynamic (isotonic, isokinetic) contractions; between negative (eccentric) and positive (concentric) work.

7. describe the relative differences in energy requirements when comparing the work done in eccentric versus concentric contractions of the same muscle group.

8. describe a muscle twitch curve for fast and slow muscles, and relate the velocity of shortening to load on the muscle.

9. relate the length of the muscle to the active and passive tension developed during contraction.

10. discuss the control of muscle tension in terms of summation; tetany; fusion frequency; and recruitment and asynchronous firing of motor units.

11. draw a simple reflex arc, label all parts, and describe its physiology as the basic functional unit of muscular control.

12. draw and label a motor unit.

13. explain the "all or none principle" of muscle contraction.

14. define proprioceptors and list the major ones involved in the control of motor activity.

15. define and explain the Golgi tendon reflex as it functions in motor control.

16. explain the function of muscle spindles and the myotatic reflex.

17. explain how strength in a muscle group is related to age and sex; explain what factors cause age and sex differences in strength.

18. explain any interrelationships between muscular strength and muscular endurance.

19. draw and label a complicated reflex arc involving decision making at the brain level; describe the physiology involved.

20. explain the sliding filament model of muscle contraction as it relates to concentric, eccentric, and isometric muscle contractions.

21. measure the strength of one or more muscle groups during isometric, concentric, and eccentric contractions, compare the differences; explain the differences.

22. collect data on muscle girth and strength for the same muscle group in several individuals; graph the relationship and explain.

23. collect strength data on two different muscle groups in a group of individuals; graph the relationship and explain.

24. collect data on isometric strength at several different angles of the knee or elbow joint in a group of individuals; graph the result and explain.

25. collect data on strength vs. muscular endurance in a group of individuals; graph the relationship and explain.

## C. RESPIRATORY ASPECTS OF PHYSICAL ACTIVITY

The student should be able to:

1. list the various volumes and capacities of the lung, define each, and explain the significance of each.

2. calculate pulmonary ventilation from knowledge of tidal volume and respiratory frequency.

3. describe the control of breathing - both at rest and during exercise - including both the nervous and chemical factors involved.

4. explain the mechanics of lung ventilation.

5. explain why maximum pulmonary ventilation is not generally considered a "limiting factor" on aerobic exercise.

6. describe hyperventilation in terms of $P_{CO2}$ of the blood.

7. define minute volume of ventilation.

8. explain how $O_2$ and $CO_2$ are transported within the blood.

9. describe the role of plasma bicarbonate as a buffer.

10. demonstrate a knowledge of resting and maximal ventilation volumes for both sexes and at various ages.

11. draw a diagram of the lungs, respiratory passageways, and pulmonary circulation, showing all significant parts related to respiration.

12. demonstrate a knowledge of the basic gas laws.

13. define partial pressure of gases and explain how partial pressures function in the movement of $O_2$ into and throughout the body; $CO_2$ from the cell to the blood and out of the body.

14. demonstrate a knowledge of the relationship between lung ventilation and oxygen consumption at various levels of metabolic activity.

15. explain the general effects of altitude on respiratory function during exercise.

16. draw a typical $O_2$-Hb dissociation curve, label all its parts, and explain what the curve tells about oxygen delivery to the cells of the body; identify and explain associated sex differences.

17. explain why hyperoxia would not be expected to aid exercise performance unless it occurred <u>during</u> the exercise.

18. define what is meant by the term "lung diffusion."

19. define anemia and polycythemia and indicate how each may affect exercise capacity.

20. define and use the terms ATPS, BTPS, STPD.

21. calculate and/or estimate the various volumes and capacities of the lung.

22. estimate the $P_{O2}$, $P_{CO2}$, and $P_{N2}$ in atmospheric air at any barometric pressure.

D. CIRCULATORY ASPECTS OF PHYSICAL ACTIVITY

1. demonstrate a knowledge of heart rate response to various levels of metabolic activity; indicate age and sex differences.

2. draw, label, and explain a typical electrocardiographic tracing.

3. explain systole and diastole; indicate the significant circulatory events which occur during each.

4. define the end systolic, end diastolic, and stroke volumes of the heart.

5. demonstrate a knowledge of stroke volume in relation to sex and age during various levels of metabolic activity.

6. define and explain cardiac output; demonstrate a knowledge of cardiac output in relation to age and sex during various levels of metabolic activity.

7. demonstrate a knowledge of the interrelationships among oxygen consumption, stroke volume, heart rate, and arterio-venous $O_2$ difference.

8. demonstrate a knowledge of the control of total cardiac output, systemic and regional blood pressure, and local blood flow both at rest and during exercise.

9. describe the distribution of total cardiac output at rest and during strenuous exercise.

10. draw and label a graph showing typical heart rate curves during rest, exercise at various intensities, and recovery from the exercise.

11. define blood pressure (systolic, diastolic, pulse pressure) and explain how it is commonly measured.

12. indicate normal ranges for blood pressure at various ages and for each sex.

13. describe the response of blood pressure to various types of exercise (especially static and dynamic differences).

14. estimate maximum cardiac output when given knowledge of age and resting stroke volume.

15. explain what factors are primarily responsible for sex differences in circulatory and respiratory functions.

16. explain "cardiac hypertrophy" and the bradycardia of training.

17. accurately measure heart rate response to various levels of metabolic activity utilizing palpation of common sites, auscultation with stethoscope, and electronic recorders.

18. accurately determine systolic and diastolic blood pressure in the brachial artery utilizing a pressure cuff and stethoscope.

19. collect, organize, graph, and interpret data on heart rate responses to various levels of metabolic activity utilizing a bicycle and/or step ergometer, running, swimming, etc.

20. if proper equipment is available, make measurements of oxygen consumption; if not, explain how the measurements would be made.

## E. ENVIRONMENTAL ASPECTS OF PHYSICAL ACTIVITY

The student should be able to:

1. identify the sports and conditions under which heat stress is likely o present a serious problem and explain why a problem may exist in those activities.

2. identify the sports and conditions under which altitude is likely to interfere with exercise performance and explain why a problem might exist in those activities.

3. explain the physical principles of heat gain and heat loss by the human body, including a definition and explanation of conduction, convection, radiation, and evaporation.

4. identify the probable major avenues of heat loss and heat gain when given information about various environmental conditions.

5. write out the basic heat balance equation for the human and explain it.

6. explain how the human body acts as a heat storage reservoir.

7. list and explain the basic physiological responses that the human body makes to a heat stress imposed upon it.

8. explain how climate (wet vs. dry), level of activity, water and salt balance, clothing, pre-exercise cooling, physical conditioning, and acclimatization modify basic human physiological responses to heat stress.

9. list and explain the possible medical consequences of ineffective adjustment to heat stress.

10. identify the symptoms of the major medical consequences of ineffective adjustment to heat stress; outline first aid procedures for each condition listed.

11. explain the process of human sweating, including purpose, rate(s), and composition.

12. demonstrate a knowledge of the advantages, disadvantages, and misconceptions in regard to commercial electrolyte preparations.

13. describe an appropriate program of salt and water replacement for various physical activities.

14. describe the role of the skin blood vessels in temperature regulation.

15. describe the role of the hypothalamus in regulating core temperature.

16. identify and explain sex differences in physiological responses to heat.

17. describe the relationship between barometric pressure and the partial pressure of oxygen; indicate the effect on respiration and metabolism.

18. describe the effect of acclimatization to altitude on minute volume of ventilation, hemoglobin concentration, and maximal aerobic power.

19. describe the effect of increasing altitude on hear rate and cardiac output.

20. explain why physical performances lasting less than two minutes are relatively unaffected by high altitude.

21. explain why physical performances listing more than two minutes are significantly affected by high altitude.

22. identify and explain the potential effects of tobacco smoking on respiration and circulation.

F. THE ROLE OF NUTRITION, DIET, AND ERGOGENIC AIDS IN PHYSICAL ACTIVITY

The student should be able to:

1. describe the current prevailing theory (theories) regarding the physiological benefits of exercise induced activation (warm-up) and explain the optimum conditions for performance enhancement by warm-up.

2. explain what is meant by "basal metabolic rate" and how it is measured.

3. measure body composition in both males and females of school age and classify according to desirability.

4. explain the effect excess body fat has on performance in various physical activities.

5. identify optimum levels of body composition (percent fat) for athletes and non-athletes, both males and females of school age.

6. list the essential nutrients and explain why each is needed by both athletes and non-athletes.

7. estimate the caloric requirements of male and female athletes and non-athletes and outline basic diet plans for each, including "pre-event meal."

8. describe the physiological responses to food ingested prior to exercise.

9. explain the basic principles of human fat reduction; be able to develop a safe and effective fat reduction program using dietary and/or exercise intervention.

10. explain the various techniques that may be utilized to increase muscle storage of carbohydrate.

11. use estimates of energy expenditure in various forms of physical activity (e.g., walking, running, swimming, cycling, various sports) in prescribing exercise as part of a fat reduction program.

12. demonstrate a knowledge of the importance of experimental design in evaluating erogenic aids (e.g., double blind, placebo, control group, etc. vs. the "testimonial").

13. explain the effects of anabolic steroids on muscle strength and power development; explain possible harmful side effects.

14. demonstrate the use of skinfold calipers in estimating relative body fat.

15. describe the potential ergogenic effect of hyperoxia; explain the physiological basis.

16. demonstrate a knowledge of the possible benefits and hazards of amphetamine usage in exercise.

G. PRINCIPLES OF TRAINING AND CONDITIONING

The student should be able to:

1. describe the nature and scope of physiological adjustments under the stress of muscular activity.

2. define the contributions of training effects to high level physical performance.

3. specifically, explain the potential roles of regular exercise in prevention of chronic diseases and in enhancement of physical working capacity.

4. apply sound physiological principles in the designing of training and conditioning programs:

   a. write a definition of interval training.
   b. list and explain the major variables that are manipulated in most interval training programs.

c. explain the inter-relationships among intensity, duration, and frequency of exercise, and total work in training programs for cardiorespiratory improvement.
d. define the concept of progressive resistance exercise (PRE); explain how PRE would be applied in training the circulatory system; explain how PRE would be used to improve muscular strength and endurance.
e. prepare a list of common exercise modes and sports and indicate the relative contribution of each to the development of anaerobic power, aerobic power, strength, and body composition.
f. demonstrate a knowledge of the advantages and disadvantages of various training approaches for cardiorespiratory fitness and strength improvements.
g. define flexibility and indicate the best techniques for improvement of flexibility.
h. identify components of motor fitness and health-related fitness; describe principles for improving each.

## H. APPLICATION OF PHYSIOLOGICAL CONCEPTS

At the conclusion of the basic exercise physiology course(s), the student should be able to apply physiological concepts to human motion in a wide variety of activities including improvement of performance in motor activities, evaluation of exercises for special purposes, design of basic conditioning programs, and evaluation of equipment used in athletics and other forms of exercise. This ability should be developed to the extent that the student is able to demonstrate a systematic approach to the problem areas listed above. More specifically, the student should be able to:

1. analyze the physiological requirements of sports and other forms of exercise to the extent of being able to deduce the fitness components and predominant energy systems utilized.

2. design and carry out programs aimed at improving the various fitness components and developing optimum utilization of energy systems.

3. evaluate a performer's potential for development in various sport activities and assess his/her degree of accomplishment of that potential at any one point in time.

4. identify those physiological factors which may be limiting a performer's capacity and establish a priority for change in those most likely to lead to improvement.

5. evaluate various physical activities and physical activity situations regarding their safety for the participant.

## IV. FACILITIES AND EQUIPMENT

The requirements of this course(s) cannot be completed satisfactorily unless suitable laboratory space and equipment are available.

### A. LABORATORY

There should be a separate room(s) of adequate size (a minimum of 900 sq. ft.) specifically designated as a laboratory and suitably equipped to accommodate

undergraduate student laboratory experiences (Enrollments for laboratory sections should not exceed 20.).

B. EQUIPMENT

Although not necessarily part of a permanent inventory, the equipment listed should be available for use in undergraduate exercise physiology.

1. Essential Equipment
   a. blood pressure cuffs
   b. stethoscopes
   c. bicycle ergometer(s)
   d. step ergometers (benches) of various heights
   e. stop watches
   f. weighing scale
   g. accurate stadiometer
   h. strength measuring equipment
   i. skinfold calipers
   j. electronic calculators
   k. spirometer(s)

2. Desirable Equipment
   a. electrocardiograph and chest electrodes
   b. motor driven treadmill
   c. chemical or electronic gas analysis equipment
   d. gas meter and gas collection equipment
   e. tank and apparatus for hydrostatic weighing
   f. equipment for measurement of residual volume
   g. programmable calculator(s)
   h. computer terminal(s)
   i. equipment for measurement of body temperature (skin and core)

V. FACULTY

Teachers of undergraduate exercise physiology should be specialists whose academic preparation includes graduate specialization in exercise physiology and whose continuing education includes additional course work workshop attendance, research, and professional activity in exercise physiology. In a field where knowledge is expanding at a very rapid rate, the need to participate in activities which assist with the process of keeping current is critical. Doctoral students specializing in exercise physiology should be encouraged to assist in the teaching of undergraduate exercise physiology but should not have sole responsibility for these courses.

## VI. REFERENCES

1. AAHPERD. Professional preparation in health education, physical education, recreation education. AAHPERD. Washington, DC. 1962.

2. AAHPERD. Professional preparation in dance, physical education, recreation education, safety education, and school health education. AAHPERD. Washington, DC. 1974.

3. Kroll, W. P. Perspectives in physical education. Academic Press. New York. 1971.

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[a]The courses in which a student would most likely develop these entering competencies are human anatomy, human physiology, and pre-calculus mathematics.

[b]The use of calculators in demonstrating competencies in the listed operations is encouraged.

[c]The order of presentation of standards should not be interpreted as the recommended order for planning a course.

GUIDELINES AND STANDARDS FOR
UNDERGRADUATE SPORT PSYCHOLOGY

Sport psychology is a new and rapidly developing discipline. Defined as the science of athletic behavior, its primary aim is to help athletes appreciate, enjoy and improve their individual and collective performances.

**Prerequisites**

It is suggested that students should have successfully completed courses in:

a) General Psychology
b) Introduction to Sociology

## COMPETENCIES

### GENERAL COMPETENCIES

With the exception of the introduction and historical perspectives section, the following competencies apply to each of the areas identified below.

The student will:

1. define relevant terms, e.g., personality, aggression, motivation, etc.

2. identify and describe relevant theories, e.g., theories of personality, aggression, team cohesion, etc.

3. identify the indicators of, e.g., altered states of consciousness, personality, racism, etc.

4. identify the variables which affect, e.g., motivation, team cohesion, aggression, etc.

5. describe how to manage or alter, e.g., aggression, anxiety, attention, etc.

6. identify and describe the important research studies completed in, e.g., self regulation, motivation, sport leadership, etc.

## I. INTRODUCTION AND HISTORICAL PERSPECTIVES

The student will:

1. define psychology.
2. identify and describe the systems of psychology.
3. identify the great psychologists and describe their contributions.
4. identify and describe the three major methodological approaches to the study of human behavior, e.g., the psychoanalytic behavioral and cognitive.
5. define sport psychology.
6. identify and describe the historical milestones in the rise of sport psychology in Europe from the modern Olympic Games to the present time.
7. identify and describe the historical milestones in the rise of sport psychology in North America from the 1900's to the present time.
8. describe the emphasis given to sport psychology in the U.S.S.R.
9. identify, by name, the governing organizations for sport psychology in North America.
10. identify, by name, the governing organization for sport psychology in the world.
11. identify, by name, the "father" of sport psychology in North America and describe his contributions.
12. identify and describe the major areas of contemporary sport psychology.
13. describe the role of theory and research.

## II. ALTERED STATES OF CONSCIOUSNESS

The student will:

1. provide examples of ways in which information of altered states of consciousness may be used to provide athletes with opportunities to realize their fullest potential in sport.
2. demonstrate understanding of the concept "altered states of consciousness" and the way the structures of sport function to foster this type of experience.
3. identify and describe the differences between various sports in stimulating altered states of consciousness.
4. discuss the concept of peak-experiences (e.g., Maslow's, Ravizza's and Csikszentimihalyi's) in psychology and sport.

5. discuss the inter-relationship of psychological and physiological factors (both peripheral and central) of altered states.

6. examine ways that sport situations may be constructed to increase the participant's ability to concentrate and develop awareness of the direct movement experience.

7. demonstrate a basic understanding of the holistic approach that the Eastern Movement disciplines (e.g., yoga, tai chi, martial arts) incorporate in developing the participants fullest potential.

III. SPORT PERSONALITY

The student will:

1. provide examples of ways in which personality information may be used to provide athletes with opportunities to achieve their fullest potential in sport.

2. describe efforts to select athletes for team membership through the application of psychometric techniques.

3. identify and describe the major variables affecting the performance-personality relationship, e.g., sex, skill level, somatotype, etc.

4. discuss the conceptual problems (e.g., Morgan's mental health model) surrounding the definition of personality as a determinant of behavior in sport, (e.g., Skinner's view that personality does not exist).

5. identify the responsibilities and limitations of the coach and/or trainer in dealing with emotional disturbances of athletes.

6. compare and contrast the major theories of personality (e.g., Eysenck, Mischel, Cattell, et. al.) as they relate to sport settings.

7. discuss the importance of individual differences in psychological characteristics in terms of interpersonal relations in sport settings (e.g., player-player, player-coach).

8. discuss the potential role of personality in both occurrence and recovery from athletic injuries.

IV. MOTIVATION

The student will:

1. provide examples of ways in which information about motivation may be used by athletes to realize their fullest potential in sport.

2. describe the motivational process, i.e. the role of familial, sub-cultural, situational and task dimensions.

3. describe the role of feedback and reinforcement in motivation.

4. provide examples of how behavior modification techniques may be used to improve performance in sport environments.

5. describe the influence of extrinsic rewards on intrinsic motivation.

6. discuss the role of goal setting in motivation.

7. discuss achievement motivation as it relates to sport.

8. discuss the differences and similarities between the techniques used to motivate individual players and the team.

## V. AROUSAL

The student will:

1. provide examples of ways in which information about arousal may be used by athletes to realize their fullest potential in sport.

2. discuss the strengths and weaknesses of various theories (drive theory) of arousal.

3. discuss the similarities and differences between physiological and cognitive correlates of arousal.

4. demonstrate the effects of arousal on strength, speed, and endurance.

5. discuss the effects of arousal on gross and fine motor control tasks.

6. discuss the concept of "optional" arousal as it relates to performance.

## VI. ANXIETY

The student will:

1. provide examples of ways in which information about anxiety may be used by athletes to realize their fullest potential in sport.

2. identify and describe the physiological and cognitive correlates of anxiety.

3. identify and describe the signs and causes of player and teacher/coach "burn-out".

4. identify and describe the environmental and individual factors which affect the anxiety-performance interface.

5. discuss the similarities and differences between stress, anxiety, and arousal.

6. describe the role of self and other perceptions in understanding and overcoming stress-related problems.

7. describe the impact of goal setting, attributions, and expectancies on anxiety.

## VII. ATTENTION

The student will:

1. provide examples of ways in which information about attention may be used by athletes to realize their fullest potential in sport.

2. identify and describe the attentional styles (internal-external, broad-narrow) that are needed in a wide variety of sport situations.

3. identify and describe individual differences in attention.

4. identify and describe a personal program for improving concentration.

5. identify and describe factors which enable athletes to maintain a balance between attending to internal (thoughts, feelings, and ideas) and external (environmental) processes.

## VIII. AGGRESSION

The student will:

1. provide examples of ways in which information about aggression may be used by athletes to help them realize their fullest potential in sport.

2. demonstrate how instinctual, drive, social learning, and coercive theories of aggression relate to the learning of aggressive behavior by athletes and spectators.

3. identify and describe the major components of aggressive behavior (e.g., reactive and instrumental) and how they are exhibited in sport environments.

4. discriminate aggressive behavior from assertive behavior in various sports (non-contact, semi-contact, and contact).

5. describe how sport environments may result in cathartic or esculatory responses following the exhibition of aggressive behavior.

6. identify and describe the sources (e.g., parental and peer influences, etc.) that facilitate or inhibit the exhibition of aggressive behavior in sport.

7. describe the personal and social characteristics (e.g. moral development, social and economic factors) of participants that facilitate or inhibit the exhibition of aggressive behavior in sport.

8. demonstrate how aggressive behavior may be reduced and controlled in sport with particular reference to officials and other players.

9. demonstrate how appropriate attitudes toward aggression and assertion may be developed in players, spectators, coaches and parents.

10. articulate the larger and significant role of sport, aggression and moral decisions in interpersonal behavior.

## IX. SELF REGULATION OF PSYCHOLOGICAL PROCESSES

The student will:

1. provide examples of ways in which information about self regulation may be used by athletes to realize their fullest potential in sport.
2. name and describe the general organization of the nervous system.
3. describe the organization and functions of the various parts of the brain with particular attention to right and left hemispheres.
4. explain the effects of stress and anxiety on performance.
5. identify and describe the physiological parameters used in biofeedback training.
6. identify and describe the components of several techniques (e.g., Jacobson) of self regulation with particular attention to the positive and negative aspects of each technique.
7. identify and describe the anatonomical and physiological basis of biofeedback.
8. explain the therapist's and client's roles, responsibilities, ethical considerations and interactions in biofeedback training.
9. describe the use of systematic desensitization in sport environments.
10. discuss the use of biofeedback in athletics, specifically for psychological applications.
11. describe the use of biofeedback to enhance learning.

## X. SPORT LEADERSHIP

The student will:

1. provide examples of how information about leadership may be used by athletes and coaches to realize their fullest potential.
2. identify the evolution of leadership theory from antiquity to the present time.
3. identify and describe leadership styles (e.g., humanistic, authoritarian, etc.) found in sport environments.
4. identify and describe tests that may be used to assess sport leadership.
5. describe the important features of Vail's high performance systems approach to the study of sport leadership.

## XI. HUMANISM IN SPORTS

The student will:

1. provide examples of ways in which information about humanism may be used by athletes and coaches to realize their fullest potential in sport.

2. compare and contrast leadership models in sport in regard to their humanistic potential.

3. identify and compare different value orientations in sport (e.g., cooperation vs. competition, product vs. process, business vs. educational, etc.).

4. specify the components of the humanistic value orientation as it applies to the athlete.

## XII. COHESIVENESS

The student will:

1. provide examples of ways in which information about cohesiveness may be used by athletes to realize their fullest potential in sport.

2. identify and describe the general antecedents and consequences of cohesiveness.

3. identify and describe task characteristics (e.g. interacting vs. coacting teams) that relate to the cohesiveness-performance relationship in sport.

4. differentiate cohesiveness as an attraction to group construct from interpersonal attraction or sociometric cohesion.

## XIII. SEX ROLES

The student will:

1. provide examples of ways in which information about sex roles may be used by athletes to realize their fullest potential in sport.

2. provide examples of sexist practices in sport environments.

3. identify and describe how various cultures have defined and structured sex roles, particularly as they relate to sport.

4. discuss the effects of sex role socialization in relation to sport, e.g., attributions, teacher and pupil expectancies, and achievement behavior.

5. demonstrate competence in recognizing sexism in physical education and sport, e.g., teacher behaviors, administrative policies and procedures, formal curriculum and related programs, pupil interactions, and instructional materials.

6. discuss the development and implementation of strategies for changing sexist practices in physical education and sport.

## XIV. RACISM

The student will:

1. provide examples of ways in which information about racism may be used by athletes and coaches to realize their fullest potential in sport.

2. provide examples of racism in sport environments.

3. identify and describe how various cultures have defined and structured racial practices in sport.

4. discuss the effects of racism socialization practices in relation to sport, e.g., separation versus integration.

5. demonstrate competence in recognizing racism in physical education and sport, e.g., teacher/coach behaviors, administrative practices, etc.

6. discuss the development of strategies for changing racism practices in physical education and sport.

## XV. HISTORICAL ASPECTS OF PLAY THEORY

The student will:

1. demonstrate knowledge of play in preliterate societies and how it is related to the group's particular environment.

2. demonstrate knowledge of the relationship of play to the early Greek and Roman civilizations.

3. understand the influence of religion on play from the middle ages to modern times.

4. understand the roles of work and play in modern Western society.

## XVI. SOCIAL PSYCHOLOGICAL ASPECTS OF PLAY

The student will:

1. demonstrate knowledge of the developmental aspect of play through the life cycle of man.

2. understand attitudes toward play and the major forces instrumental in their formation.

3. demonstrate knowledge of the role of play in the cognition, social and moral development of the child.

4. demonstrate fundamental knowledge of the major theories concerned with play behavior and their limitations.

5. explain the role of arousal-seeking, competence motivation, exploration and divergent thinking in play.

6. explain the relationship between play and achievement motivation.

7. identify the conditions which undermine play (e.g., environmental pressures, unnecessary extrinsic reinforcement).

8. identify the conditions in sport which are play supportive and those which limit or undermine play.

## XVII. BIO-BEHAVIORAL ASPECTS OF PLAY

The student will:

1. demonstrate basic knowledge of the physiological correlates of play activity:

   a. heart rate as a measure of activity level
   b. respiration as a measure of activity level

2. understand the physical limitations of special populations and how to plan for their play activities.

## XVIII. METHODOLOGY

The student will:

1. demonstrate a basic knowledge of quantitative methods for the analysis of play behavior data.

2. understand fundamentals of experimental design.

3. demonstrate competency in the use and advantages of observational techniques.

4. demonstrate skills in the use of audio-visual equipment for observation.

## XIX. ENVIRONMENTAL ASPECTS OF PLAY

The student will:

1. demonstrate an understanding of how the physical environment influences play behavior.

2. understand various components of playground design in both urban and rural settings.

## GUIDELINES AND STANDARDS FOR UNDERGRADUATE ADAPTED PHYSICAL EDUCATION

In response to a growing need for direction in the preparation of personnel to provide physical education services to the disabled, three structures within the alliance have developed guidelines in adapted physical education. These guidelines, in the form of competencies, were developed by the following AAHPERD structures: Adapted Academy, NASPE, Therapeutics Coucil, ARAPCS, and the Unit on Programs for the Handicapped. Initially drafted in July 1979, the guidelines have been subjected to internal and external review, including a national dissemination in the January 1980 IRUC Briefings. Data gathered from this publication, from interested individuals, and from state associations have been compiled into the final guidelines.

It should be noted that these guidelines identify competencies but do not address the areas of learning activities, evaluation techniques, or performance criteria. The Committee (task force) felt these areas are the responsibility of those using the guidelines.

Based on continued input and suggestions from adapted physical education professionals, the committee (task force) makes the following suggestions for additional study in the area of personnel preparation in adapted physical education.

The guidelines are limited to competencies necessary for the regular physical education generalist and the adapted physical education specialist. The generalist will be increasingly responsible for meeting physical and motor needs of students with motor disabilities in regular physical education classes. Competencies identified are, for the most part, limited to those with direct relationship to dealing with individuals with disabilities in regular physical education classes or, those which would serve as the basic foundation for the more specialized competencies of the adapted physical education specialist. The adapted physical education specialist should possess the competencies identified for the generalist as well as specialist. The adapted physical education specialist is an individual who is not only capable of teaching students with various disabilities who are integrated into regular physical education classes, but also the more disabled students requiring a special physical education program.

### I. BIOLOGICAL FOUNDATIONS

#### A. KINESIOLOGY

1. Demonstrate understanding of functional anatomy as it applies to analyses of motor skills.

2. Demonstrate understanding of the organization and functions of the nervous system including implications of neuromuscular relationships and functioning.

3. Demonstrate understanding of deviations from normal physical growth and development, including musculoskeletal deviations, neurological disorders, and neuromuscular deficiencies.

4. Demonstrate understanding of influences which the human structure exerts on motor capabilities of individuals with or without disabilities.

5. Demonstrate proficiency in evaluating and analyzing motor performances and motor dysfunctions in terms of biomechanical principles and laws.

6. Demonstrate ability to apply understanding of motor dysfunctions and their implications to adapted physical education programs.

7. Demonstrate ability to apply understanding of neurological disorders and their implications to motor functioning.

8. Demonstrate ability to apply understanding of deviations from normal physical growth and development to analyses of motor skills.

9. Demonstrate proficiency in evaluating and analyzing motor performances in terms of motor dysfunctions.

10. Demonstrated ability to apply biomechanical principles which affect motor functioning to wheelchair, crutch, braces, and artificial limb use.

11. Demonstrate ability to apply biomechanical principles which affect motor functioning to posture, and nerological, muscular, and other specific physical health needs.

B. PHYSIOLOGY OF EXERCISE

1. Demonstrate understanding of immediate as well as long term physiological response of the human body to exercise.

2. Demonstrate ability to design instructional physical education programs in accordance with essential physiological considerations and principles.

3. Demonstrate proficiency in conducting instructional physical education programs in accordance with essential physiological considerations and principles.

4. Demonstrate proficiency in communicating physiological benefits of regular physical activity for program participants.

5. Demonstrate ability to apply research findings from exercise physiology to instructional physical education programs.

6. Demonstrate knowledge of how dysfunctions affect physiological responses to exercise.

7. Demonstrate ability to design instructional physical education programs in accordance with essential physiological considerations and principles specific to individuals with disabilities.

8. Demonstrate proficiency in conducting instructional physical education programs in accordance with essential physiological considerations and principles specific to individuals with disabilities.

9. Demonstrate ability to apply research findings in the areas of exercise physiology specific to individuals with disabilities.

C. PHYSIOLOGICAL AND MOTOR FUNCTIONING

1. Demonstrate understanding of the components of physiological and motor functioning.

2. Demonstrate understanding of functional capacity, complexity, and adaptability of the human organism as bases for skillful motor performances.

3. Demonstrate understanding of anatomical and physiological deviations in the human organism and effect such deviations have on motor performances.

4. Demonstrate understanding of specific basis for preventing and caring for injuries common to physical education, sport, dance, and play activities.

5. Demonstrate ability to apply an understanding of physiological functioning of individuals with physical, mental, sensory, neurological and other specific health needs to programs designed to improve motor performances of these individuals with disabilities.

6. Demonstrate ability to apply an understanding of physiological motor characteristics for individuals with physical, mental sensory, neurological and other specific health needs to programs designed to improve motor performances of these individuals with disabilities.

7. Demonstrate ability to apply techniques for the prevention and care of injuries specific to individuals with specific disabilities.

II. SOCIOLOGICAL FOUNDATIONS

A. SPORT, DANCE, AND PLAY

1. Demonstrate understanding of roles and importance of sports, dance, and play activities to individuals living in contemporary American society, including their significance for individuals with disabilities.

2. Demonstrate understanding of ethnic, social, and cultural aspects of sports, dance, and play.

3. Demonstrate knowledge of roles and importance of sports, dance, and play for individuals in the community, including such opportunities for individuals with disabilities.

4. Demonstrate awareness of community opportunities in sports, dance, and play for individuals with disabilities.

5. Demonstrate understanding of values of lifetime physical activities to all individuals, including those with disabilities.

6. Demonstrate ability to analyze the role and significance of sport, dance, and play in the lives of individuals with disabilities.

7. Demonstrate understanding of roles and significance of lifetime physical activities for individuals and disabilities.

8. Demonstrate understanding of influence of community social agencies on sport, dance, and play in lives of individuals with disabilities.

B. COOPERATIVE/COMPETITIVE ACTIVITIES

1. Demonstrate understanding of the potential of cooperative/competitive activities for human interaction and social behavior.

2. Demonstrate knowledge of organizations which conduct adapted sport, dance, and play programs and activities for individuals with disabilities.

3. Demonstrate ability to apply understanding of the potential for human interaction and social behavior occurring in coopertive/competitive activities for individuals with disabilities.

4. Demonstrate ability to work and cooperate with organizations which conduct adapted sport, dance, and play programs and activities for individuals with disabilities.

C. SOCIAL DEVELOPMENT

1. Demonstrate understanding of social learnings involved in experiencing human movement and its effects on perception, motivation, and personality.

2. Demonstrate understanding of the potential that sport, dance, and play provides for social interactions among individuals with and without disabilities.

3. Demonstrate ability to apply understanding of the potential that sport, dance, and play provides for social interaction among individuals with and without disabilities.

III. PSYCHOLOGICAL FOUNDATIONS

A. HUMAN GROWTH AND DEVELOPMENT

1. Demonstrate understanding of human growth and development.

2. Demonstrate understanding of how deviations in normal human growth and development can result in disabilities.

3. Demonstrate knowledge of normal and atypical motor development.

4. Demonstrate ability to apply understanding of deviations in normal human growth and development of individuals with physical, mental, sensory, neurological, and other specific health needs.

5. Demonstrate ability to apply understanding of atypical motor development to individuals with disabilities.

B. MOTOR LEARNING

1. Demonstrate proficiency in applying principles of motor learning to teaching and learning of motor skills.

2. Demonstrate ability to apply principles of motivation, including to individuals with disabilities, on learning of motor skills.

3. Demonstrate ability to apply principles of motor learning to individuals with specific physical and motor needs.

4. Demonstrate ability to apply principles of motivation on development of motor skills by individuals with disabilities.

C. SELF-CONCEPT AND PERSONALITY DEVELOPMENT

1. Demonstrate understanding of relationships among positive and negative movement experiences and self concept.

2. Demonstrate ability to help students with and without disabilities develop positive self-concepts.

3. Demonstrate ability to apply skills and techniques to assist individuals with and without disabilities overcome attitudinal barriers which can affect interpersonal relationships and development of positive self-concepts.

4. Demonstrate understanding of relationships between an individual's personality development and participation in physical education, sport, dance, and play programs.

5. Demonstrate understanding of how participating in physical and motor activities contributes to positive self-concepts of individuals with disabilities.

6. Demonstrate ability to apply understanding of how interpersonal relationships are affected by participation in physical and motor activities.

7. Demonstrate ability to apply skills and techniques to assist individuals with disabilities overcome additional barriers which can affect interpersonal relationships and development of positive self-concepts.

D. MANAGEMENT OF BEHAVIOR

1. Demonstrate ability to apply various methods for developing appropriate student behavior.

2. Demonstrate an understanding of principles of motivation as they affect human behavior and promote motor performance.

3. Demonstrate ability to apply appropriate techniques for managing behavior (i.e., Behaviorism, Existentialism, Humanism).

4. Demonstrate ability to apply techniques of motivation to enhance acceptable behavior and promote motor performance.

## IV. HISTORICAL-PHILOSOPHICAL FOUNDATIONS

### A. HISTORICAL DEVELOPMENT

1. Demonstrate understanding of the historical development of physical education.

2. Demonstrate understanding of roles and significance of physical education professional organizations on development of professional standards, ethics, and programs related to physical education.

3. Demonstrate understanding of the historical development of adapted physical education.

4. Demonstrate understanding of roles and significance of professional and voluntary organizations on development of professional standards. ethics, and programs related to adapted physical education.

### B. PHILOSOPHICAL DEVELOPMENT

1. Demonstrate understanding of the philosophies of physical education.

2. Demonstrate ability to apply a personal/professional philosophy of physical education.

3. Demonstrate understanding of current issues and emerging trends in physical education and their philosophical significances.

4. Demonstrate ability to identify ways that individuals realize and express their individualities and uniquenesses through physical education, sport, dance, and play programs.

5. Demonstrate understanding of philosophies of adapted physical education.

6. Demonstrate ability to apply a personal/professionalphilosophy of adapted physical education.

7. Demonstrate understanding of current issues and emerging trends in adapted physical education and their philosophical significances.

8. Demonstrate understanding of ways individuals with disabilities realize and express their individualities and uniquenesses through physical education, sport, dance, and play programs.

## V. ASSESSMENT AND EVALUATION

### A. PROGRAM GOALS AND OBJECTIVES

1. Demonstrate understanding of goals and objectives of physical education, including programs and activities for individuals with disabilities.

2. Demonstrate ability to identify performance of instructional objectives leading to fulfillment of physical education goals in psychomotor, affective, and cognitive domains.

3. Demonstrate ability to apply goals and objectives of adapted physical education.

4. Demonstrate ability to develop instructional objectives which lead to fulfillment of physical education goals in psychomotor, affective, and cognitive domains by individuals with disabilities.

B. SCREENING AND ASSESSMENT

1. Demonstrate proficiency in using appropriate instruments, i.e., screening devices through standardized tests - and procedures to measure physiological, biomechanical, and psychomotor functions.

2. Demonstrate ability to select various assessment instruments for measuring physical and motor performance.

3. Demonstrate ability to construct various assessment instruments for measuring physical and motor performance.

4. Demonstrate proficiency in applying appropriate instruments and procedures for measuring levels of physiological, biomechanical, and psychomotor functioning of individuals with disabilities.

5. Demonstrate proficiency to interpret assessment results of students with disabilities in terms of physical education goals and objectives.

C. EVALUATION

1. Demonstrate proficiency in using appropriate instruments to evaluate physical and motor needs of individual students.

2. Demonstrate ability to apply basic evaluation principles in determining student progress in physical education.

3. Demonstrate ability to interpret evaluation results as they apply to physical education goals, and activities.

4. Demonstrate proficiency in applying evaluation results to appropriate physical education goals, objectives, and activities.

5. Demonstrate proficiency in applying appropriate instruments in determining physical and motor needs of individuals with disabilities.

6. Demonstrate proficiency in applying principles of the evaluation in determining student progress in adapted physical education.

## VI. CURRICULUM PLANNING, ORGANIZATION, AND IMPLEMENTATION

### A. PROGRAM PLANNING

1. Demonstrate ability to plan instructional programs emphasizing the following areas:
   a. physical and motor fitness
   b. fundamental motor skills and patterns
   c. skills in aquatics, dance, individual and group games and sports, including lifetime sports and leisure skills.

2. Demonstrate proficiency in planning instructional programs to meet needs of students with disabilities emphasizing the following areas:
   a. physical and motor fitness
   b. fundamental motor skills and patterns
   c. skills in aquatics, dance, individual and group games and sports, including lifetime sports and leisure skills.

3. Demonstrate ability to plan individual physical education programs based on goals and objectives established by an interdisciplinary team.

4. Demonstrate ability to adapt physical and motor fitness activities, fundamental motor skills and patterns, aquatics and dance, and individual and group games and sports, including lifetime sports and leisure skills, to accommodate needs of individuals with disabilities.

5. Demonstrate understanding of organizations that govern adapted sports and games.

### B. INDIVIDUAL INSTRUCTION

1. Demonstrate understanding of the principles of individualized instruction.

2. Demonstrate ability to plan physical education programs based on student's current levels of performance.

3. Develop ability to apply strategies for individualizing instruction in regular physical education settings.

4. Demonstrate ability to apply strategies for individualizing instruction for students with disabilities in a variety of instructional settings.

5. Demonstrate ability to apply task analysis techniques in the process of individualizing instruction.

6. Demonstrate ability to implement appropriate physical education programs for individuals with disabilities based on each student's current level of performance.

### C. PROGRAM IMPLEMENTATION

1. Demonstrate understanding of relationships among supportive factors (i.e., administrative policies, facilities, equipment, faculty, community) and effective implementation of physical education curricula.

2. Demonstrate understanding of role and significance of physical educators as members of interdisciplinary teams.

3. Demonstrate ability to implement appropriate physical education curricula for individuals with disabilities based upon adequate supportive factors (i.e., administrative policy, facilities, equipment, faculty, and community).

4. Demonstrate ability to function effectively as a member of an interdisciplinary team.

5. Demonstrate ability to apply appropriate techniques for facilitating interdisciplinary communication among all persons working with individuals with disabilities.

D. SAFETY CONSIDERATIONS

1. Demonstrate understanding of safety principles related to physical and motor activities.

2. Demonstrate knowledge of specific safety considerations for individuals with disabilities when they participate in physical education, sport, dance, and play program activities.

3. Demonstrate ability to apply principles of safety to wheelchair transfers, lifts, and assists needed when individuals with disabilities participate in physical activities.

4. Demonstrate understanding of scientific bases for specifically contraindictated exercises and activities for individuals with disabilities.

E. HEALTH CONSIDERATIONS

1. Demonstrate understanding of appropriate health principles and practices related to physical and motor activities.

2. Demonstrate knowledge of special health considerations when individuals with disabilities participate in physical education, sport, dance, and play programs.

3. Demonstrate ability to apply principles of appropriate health practices to participation in physical and motor activities by individuals with disabilities.

4. Demonstrate understanding of effects of medication, fatigue, and illness on mental, physical, and motor performances of individuals with disabilities.

5. Demonstrate understanding of implications of personal hygiene, posture, and nutrition for individuals with disabilities.

GUIDELINES AND STANDARDS FOR
UNDERGRADUATE SPORT SOCIOLOGY

## I. THEORETICAL FOUNDATIONS OF SPORT SOCIOLOGY

### A. SPORT, GAME, AND PLAY CONCEPTS

Competencies:

1. Discuss the major definitions of play, games, and sport.
2. Demonstrate understanding of the evolution of sport, games, and play.
3. Demonstrate understanding of roles and importance of sport, games, and play to individuals living in society.
4. Identify the ethnic, social, and cultural aspects of play, games, and sport.
5. Explain the influences of community social agencies on physical activity.

### B. COOPERATIVE AND COMPETITIVE ACTIVITIES CONCEPTS

Competencies:

1. Discuss the potential of both cooperative and competitive activities for human interaction and social behavior.
2. Differentiate cooperative and competitive sports organization.

### C. SOCIALIZATION CONCEPTS

Competencies:

1. Interpret the potential that sport, games, and play provide for social interaction among individuals.
2. Recognize the social learnings involved in human experience of movement and their effects on perception, motivation, and personality.
3. Identify the potential that sport, play, and games have for social interaction role learning.

### D. SOCIAL STRUCTURE AND STRATIFICATION CONCEPTS

Competencies:

1. Discuss how human movement may relate to specific strata groups.
2. Explain how sport involves all strata of society sociologiests in affecting change in sports and society.

E. SOCIAL CHANGE CONCEPTS

Competencies:

1. Illustrate the role of sports sociologists in affecting change in sport and society.

F. DEVIANCE CONCEPTS

Competencies:

1. Identify the relationship between sport and violence, gambling, cheating, delinquency, etc.

2. Discuss the behavioral implications for society of drugs in sports.

3. Restate the theories of deviance and how they relate to sport.

G. SOCIAL PHENOMENON CONCEPTS

Competencies:

1. Interpret sport as a game occurrence.

2. Discuss sport as an institution.

3. Develop the idea of sport as social involvement.

H. SOCIAL INSTITUTIONS AND ORGANIZATIONS CONCEPTS

Competencies:

1. Discuss the relationship between sport and other institutions in society.

2. Differentiate the interpretations of social institutions and organizations and their relationship to sport.

I. SOCIAL MOBILITY CONCEPTS

Competencies:

1. Discuss how sport may serve as an instrument for social mobility in society.

II. METHODOLOGICAL FOUNDATIONS OF SPORT SOCIOLOGY

A. BODY OF KNOWLEDGE CONCEPTS

Competencies:

1. Identify the body of knowledge of sport sociology.

2. Interpret and critique sport sociology literature.

3. Discuss critically the merits of different approaches, points of view, etc. is the sub-discipline.

4. Identify the available professional situations for sport sociology.

## III. EXPERIMENTAL FOUNDATIONS OF SPORT SOCIOLOGY

### A. CONCEPTS IN RESEARCH

Competencies:

1. Analyze important concepts and methods used in research in sport sociology.

### B. RESEARCH DESIGN CONCEPTS

Competencies:

1. Utilize statistical procedures and research design in sport sociology.

2. Interpret statistical data and comprehend research design in sport sociology.

### C. DATA COLLECTION CONCEPTS

Competencies:

1. Select and utilize appropriate methods of data collection sport sociology.

### D. RESEARCH WRITING CONCEPTS

Competencies:

1. Write in a structured, formal research manner that establishes scholarly work in sport sociology.

### E. INTERPRETATION OF RESULTS OF RESEARCH CONCEPTS

Competencies:

1. Read and comprehend research results in sport sociology.

2. Interpret results of a research study in a scholarly and professional manner in sport sociology.

## IV. APPLIED FOUNDATIONS OF SPORT SOCIOLOGY

### A. CULTURE CONCEPTS

Competencies:

1. Identify the relationship of sport and values in American society.
2. Discuss sport heroes as they reflect cultural values.
3. Analyze the cultural roots of sport.
4. Compare and contrast the cross-cultural aspects of sport.

### B. SUB-CULTURE CONCEPTS

Competencies:

1. Identify and discuss the various sub-cultures related sport.

### C. POLITICS CONCEPTS

Competencies:

1. Analyze the relationship of sport and politics.
2. Recognize how sport is used by politicians.
3. Relate local, state, national, and international politics as they influence or are influenced by sport.

### D. ECONOMICS CONCEPTS

Competencies:

1. Discuss the relationship of sport and economics.
2. Classify the financing of sport facilities.
3. Discuss the economics of professional sport; intercollegiate athletics.
4. Identify the size of the sport industry.
5. Elucidate the costs of professional sport team ownership.

### E. RELIGION CONCEPTS

Competencies:

1. Illustrate the relationship of sport and religion and how they impact society.

F. **MEDIA CONCEPTS**

Competencies:

1. Discuss how media is impacted by sport and sport by media.

2. Analyze the relationships of the economics of media and sport.

G. **LAW CONCEPTS**

Competencies:

1. Recognize the particulars of the relationship of law and sport including anti-trust laws, etc.

H. **SOCIAL STRATIFICATION CONCEPTS**

Competencies:

1. Identify the forces of discrimination in sport.

2. Interpret theoretical explanations of stacking, quotas, etc.

3. Explain the question of the superiority of the Black Athlete.

4. Discuss the female role in sport and in society.

5. Argue the myths vs. realities of the female athlete.

I. **ROLE OF EDUCATION**

Competencies:

1. Specify the role of education to athletics.

2. Identify role of coach to the education of the athlete.

## GUIDELINES AND STANDARDS FOR UNDERGRADUATE HISTORY OF PHYSICAL EDUCATION AND SPORT

The majority of undergraduate curricula in physical education have one required three-hour course in the history and foundations of physical education. Because of this minimum exposure to our heritage, the course should take a global overview to provide the broadest understanding possible of our professional geneology and the contributions they provided to our discipline. The course should be made to live so that students may take an active interest in our past, will understand and appreciate more our current status, and will have greater insight to preferred future directions.

In order to achieve the following goals, classes should be taught with a variety of methods to include: discussion, lecture, laboratories, audio-visual presentations, dramatizations or role play, simulations, use of available resource people, individual and group work.

In departments that require the one standard history course, it is recommended that electives be provided in the history of sport and physical education that will allow the serious student to pursue study in greater depth.

The minimum competencies listed below should be met by all undergraduate physical education majors before exiting from their college or university with a bachelor's degree:

### I. COURSE KNOWLEDGE

#### A. ANCIENT SOCIETIES

1. The student is able to identify the earliest civilizations, i.e., Egypt's and China's positions and roles in sport and physical education.

2. The student is able to explain the contributions of the ancient Greeks to modern physical education and sport.

   a. The student is able to explain the contributions of the ancient Greeks to modern physical education and sport.

   b. The student will describe the Panhellenic Games and is able to:

      (1) list the four Games that comprised the Panhellenic Games;
      (2) describe the events and the general pattern of their inclusion in the ancient Olympic Games;
      (3) delineate the political and professional undercurrents in the ancient Games including the Olympic Truce.

   c. The student is able to describe basic social, religious, economic, and philosophical facts about the greek culture that will demonstrate the diversity among the ancient city-states.

3. The student is able to describe Roman sport and the influence it had on the sport of future generations.

   a. The student is able to relate the effects of politics on Roman sport.

b. The student is able to describe the type of activities that went on in the amphitheaters and other Roman entertainment centers.

c. The student is able to relate basic facts on Roman politics and religion that affected her position on sport and physical education and eventually led to the demise of sport.

B. THE MIDDLE AGES AND THE RENAISSANCE

1. The student is able to identify the factors in medieval society which affected the growth of sport and physical education.

   a. The student is able to describe the attitude of the church toward sport.

   b. The student is able to define Scholasticism and its influence on education in general and physical education in particular.

   c. The student is able to briefly describe the political, social and economic organization of the Middle Ages. (Feudalism, Manorialism, and Chivalry).

2. The student is able to list and briefly identify the major movements of the Renaissance. (Humanism, Moralism, and Realism).

3. The student is able to describe the sports that evolved with the Knights of the Chivalric period.

C. MODERN EUROPE

1. The student is able to name the outstanding leaders of early physical education and sport.

   a. The student is able to identify the early and more recent leaders of German physical education, i.e., Johann Frederick Gutsmuths, Friederich Ludwig Jahn, Adolph Speiss, Carl Diem, etc.

   b. The student is able to identify the early leaders of Swedish physical education, i.e., Per Henrik Ling, Hjalmar Ling, etc.

   c. The student is able to identify leaders who contributed to physical education in Great Britian, i.e., Ruth Morison, Archibald Maclaren, etc.

   d. The student is able to identify other important European leaders in sport and physical education such as Pierre de Coubertin and Francisco Amoros, France and Franz Nachtegal, Denmark.

2. The student is able to explain the differences in the gymnastics (physical education or sport) programs developed and promoted by the respective countries.

3. The student is able to list the basic social and political factors associated with each country's approach to physical education and sport.

## D. AMERICAN PHYSICAL EDUCATION AND SPORT

1. The student is able to trace physical education in America from the 1820's to the present.

   a. The student is able to identify the German immigrants associated with the beginning of physical education at the Round Hill School, Harvard College and the city of Boston.

   b. The student is able to identify the early detractors of physical education and note how they adversely affected its growth.

   c. The student is able to list the foreign gymnastic systems that appeared in America.

   d. The student is able to list the personalities that were most influential on the early growth of American physical education.

   e. The student is able to list the major organizations that were formed to support the spread of physical education in America, i.e., the organizations that become the AAHPERD, NAPEHE, etc.

   f. The student is able to trace the Battle of the Systems and how foreign gymnastics were eventually replaced by the Natural Movement.

   g. The student is able to note the effects that wars had on American physical education.

   h. The student is able to show how politics, economics, religion, and social customs affected the growth of physical education in America.

2. The student is able to trace the growth of sport in American life.

   a. The student is able to recognize the forces that stifled the growth of sports and various recreational pursuits during the Colonial period.

   b. The student is able to briefly trace the growth of sport and list the most prominent personalities associated with its early growth in America.

   c. The student is able to list the economic, political, social, and religious factors that were most associated with the growth of American sport.

   d. The student is able to trace the pattern of sports acceptance as a part of American physical education programs and describe the most positive and negative elements associated with this merger.

   e. The student is able to trace the general growth of the Modern Olympics.

   f. The student is able to show how the American society has discriminated against women, blacks, and other minorities in sport.

## II. COURSE UNDERSTANDINGS

### A. ANCIENT SOCIETIES

1. The student is able to contrast Eastern and Western philosophies in order to show why the United States has been most influenced by Western Society.

2. The student is able to philosophically contrast the Athenians from the Spartans and show how these differences affected their priorities and methods in general education and in physical education.

3. the student is able to explain the monistic and dualistic theories of man and the effect each had on their attitudes toward sport.

### B. MIDDLE AGES AND THE RENAISSANCE

1. The student is able to describe how the belief in asceticism developed and its effect on sport.

2. The student is able to describe how the feudal structure influenced man's sporting life depending on his social stratification.

3. The student is able to explain how each of the broad movements (Humanism, Moralism, Realism) developed during the Renaissance and the effect each had on the growth of education in general and physical education in particular.

4. The student is able to discuss the role of sports in the life of the knight, and what effect this had on future centuries.

5. The student is able to explain the relationship of the various major movements of the Middle Age ad Renaissance periods and how each played a role in affecting the political, social and religious circumstances of the world.

### C. MODERN EUROPE

1. The student is able to describe the contributions of European sport and physical education leaders and how their programs affected American and international physical education.

2. The student is able to describe the basic philosophical differences between the European physical education systems.

3. The student is able to analyze the differences in movement patterns within the various European gymnastic systems.

### D. AMERICAN PHYSICAL EDUCATION AND SPORT

1. The student is able to analyze the factors that lead to the inclusion of physical education in the early 19th century school programs and those that soon led to its temporary demise.

2. The student is able to explain how and why the objectives of American physical education have fluctuated dramatically during the course of its existence.

3. The student is able to describe how and why physical education has arrived at its present status in the American educational system.

4. The student is able to sift the major myths from facts in describing the growth and development of sport in American life, and is able to explain how the myths were created and how we can logically distinguish these myths from fact.

5. The student is able to explain how the technological and industrial revolutions had a great influence on the growth of sport in America.

6. The student is able to explain why physical education and athletics merged in the educational scheme and the reasons for the positive and negative outcomes of the merger.

7. The student is able to explain how politics have affected the Modern Olympics and how the Olympics have influenced sport in our culture.

8. The student is able to explain why discrimination was allowed in American sports and how this discrimination is now being combatted.

III. RESEARCH TECHNIQUE

A. The student is familiar with the following historical research methods:

1. descriptive

2. interpretive

3. oral

B. The student is able to differentiate between primary and secondary sources.

C. The student is able to design a simplistic historical study to include:

1. selecting and delimiting the problem

2. collecting and classifying source material

3. criticizing source materials

4. formulating tentative hypotheses

5. interpreting and presenting the facts or findings

# GUIDELINES AND STANDARDS
# FOR UNDERGRADUATE KINESIOLOGY

## INTRODUCTION

The word kinesiology is currently used in two ways. Its broader meaning is that of a discipline whose focus is the study of human movement. A narrower, but time honored, use of the word defines it as the study of the anatomical and mechanical phenomena which underlie human motion. It is in this latter context that the word kinesiology is used in this paper.

Kinesiology is an essential area of study of human beings engaging in motor performance and therefore should be a required part of the undergraduate curriculum for all students of human motion regardless of their professional or vocational direction. The purpose of the study of kinesiology at the undergraduate level is twofold. It should provide students with (1) the knowledge necessary to undertake a systematic approach to the analysis of motor skill activities and exercise programs and (2) the experience in applying that knowledge to the execution and evaluation of both the performer and the performance in the clinical or educational milieu. Accomplishment of the purpose requires both a theoretical understanding of the subject area and the ability to make professional application. In this context the use of some quantitative methodology for purposes of increasing understanding of fundamental and practicing of the application of this knowledge to the kinesiological evaluation of human movements should be qualitative. Command of the qualitative method of analysis through practice in observation of performance, and discrimination in quality of performance based on sound theoretical knowledge must be a primary goal of all undergraduate introductory kinesiology courses.

Nationally approved guidelines and standards for the content of introductory kinesiology follow. Prerequisite knowledge necessary to undertake the study of kinesiology and the minimum knowledge to be achieved through such study are stated in terms of student competencies. Provisions for the development of these competencies may assume a variety of course patterns depending upon differences in institutional cirricular and course designs. However, regardless of course arrangements, it is unlikely that an adequate level of competency will be achieved in less than four (4) semester hours of credit including at least two hours of laboratory work per week. Moreover, one third or more of the total time allotted for the basic required course content in kinesiology should be devoted to the application of kinesiological concepts (II,C in Guidelines and Standards).

## GUIDELINES AND STANDARDS

### I. PREREQUISITES (ENTERING MINIMUM COMPETENCIES)[1]

#### A. ANATOMY

1. The student is able to name and locate surface bony landmarks in the human body.
2. The student is able to name and locate major superficial muscles causing surface body contours.
3. The student is able to name and locate the individual bones of the human skeleton.
4. The student is able to describe the basic formation and structure of bone and the changes which occur in growth and development.
5. The student is able to name, locate, and classify articulations of the human body.
6. The student is able to describe the structure of human articulations, and distinguish among types.
7. Based upon a knowledge of classification of human joints, the student is able to name and demonstrate movements possible in major joints when these movements are started from the anatomical standing position.
8. The student is able to name and locate muscles and muscle groups important in human motion and to identify their primary actions.
9. The student is able to name and describe the general organization of the nervous system.
10. The student is able to describe the neuron, and distinguish among the types of neurons.
11. The student is able to define and describe the motor unit.

#### B. MATHEMATICS[2]

1. The student knows the order of precedence where series of arithmetic operations are involved and is able to complete such series where they involve addition, subtraction, multiplication, division, radical signs, parentheses or brackets.
2. The student is able to perform arithmetic operations involving fractions, decimals or percents.
3. The student is able to work with and solve problems when data appear in the form of proportions, formulas or equations.
4. The student is able to solve simple algebraic equations of the linear type.
5. The student is able to solve word problems requiring the use of simple proportions or linear equations.

6. The student is competent both in general graphing procedures, and in the interpretation of graphs.

7. The student is able to use the Pythagorean theorem in solving right triangle problems.

8. The student is able to use the metric system of measure.

## II. COURSE KNOWLEDGE (MINIMUM EXIT COMPETENCIES)[3]

### A. ANATOMICAL CONSIDERATIONS

1. Joint Structure and Function

   a. The student is able to name and define the fundamental planes and axes.

   b. The student is able to describe and demonstrate joint movements with respect to plane and axis of motion.

   c. The student is able to explain the relationships between joint structure and function.

   d. The student is able to name and demonstrate the actions possible in each joint in other than the anatomical starting position.

   e. The student is able to state the factors contributing to joint range of motion and stability.

   f. The student is able to measure a joint's range of motion and to state appropriate procedures for improving that range.

   g. The student is able to analyze human movement patterns in terms of joint actions.

2. Muscular Function

   a. The student is able to name the major muscle groups active in any given joint action.

   b. The student is able to identify the type(s) of muscular contraction (static, concentric, eccentric) occurring in any given joint action.

   c. The student is able to explain the cooperative action of muscles in controlling joint actions and to identify the role (agonist, antagonist, stabilizer, neutralizer) played by the muscle(s) in a given movement.

   d. The student is able to explain the mechanical characteristics (e.g., force-velocity and length-tension relationships) of muscle contraction in static and dynamic movements and understand their implications.

3. Neuromuscular Considerations[4]

   a. The student is able to name and define the basic structures (e.g. motor unit, muscle spindle and proprioceptors) of the neuromuscular system.

   b. The student is able to describe the anatomic bases for reflex acts and to name and define examples of reflexes (e.g. stretch reflex, righting and support reflexes, and reciprocal inhibition or co-contraction) affecting skeletal movements.

**B. MECHANICAL CONSIDERATIONS**

1. Basic Considerations

   a. The student is able to describe the nature of vector quantities and to identify such quantities.

   b. The student is able to combine and resolve two dimensional vectors.

2. Motion

   a. The student is able to name and describe the various forms of motion experienced by the human body.

   b. The student is able to define both absolute and relative motion.

3. Description of Motion (Kinematics)

   a. The student is able to name and define the basic terms of distance, displacement, speed, velocity, and acceleration as they relate to linear and angular motion, and to name and use the appropriate metric units.

   b. The student is able to describe the behavior of projectiles in both qualitative and quantitative terms.

   c. The student is able to explain the kinematic relationships between linear and angular motion.

   d. The student is able to use simple concepts of motion description (kinematics) to analyze human motion in qualitative terms.

4. Determination of Motion (Kinetics)

   a. The student is able to name and define basic terms (e.g. force, inertia, mass, momentum, and weight) applicable to linear motion, and to name and use the appropriate metric units.

   b. The student understands and can identify the important characteristics (e.g. magnitude, direction, point of application and components) of internal (muscular) and external forces.

c. The student is able to state the linear forms of Newton's laws of motion and to show the relationship between the behavior of a body experiencing linear motion and the forces responsible for that motion.

d. The student is able to enumerate and explain the effects of the six significant forces encountered in biomechanical analyses, namely weight, normal reaction, friction, buoyancy, drag and lift.

e. The student is able to explain the significance of the impulse-momentum, work-energy, and conservation of momentum relationships in the case of a body experiencing linear motion.

f. The student is able to name and define basic terms (e.g. angular momentum, couple, eccentric force, moment, moment of inertia and torque) applicable to angular motion and to name and use the related metric units appropriately.

g. The student is able to state the angular form of Newton's laws of motion and to show the relationship between the behavior of a body experiencing angular motion and the forces responsible for that motion.

h. The student is able to locate the center of gravity of an individual experimentally, and generalizing from that knowledge, is able to estimate the location of the center of gravity of persons in any position.

i. The student understands and is able to enumerate the factors which affect stability in the human body.

j. The student is able to explain the kinetic relationships between linear and angular motion.

## C. APPLICATION OF KINESIOLOGICAL CONCEPTS

At the conclusion of the basic kinesiology course(s) the student should be able to apply anatomical and mechanical analysis of human motion to a wide variety of activities including the learning and improvement of performance in motor skills, the evaluation of exercises for special purposes, and the evaluation of equipment used in athletics and exercise. This ability should be developed to the extent that the student is able to demonstrate a systematic approach to an analysis and to complete it with a basic, level of competence. Specifically:

1. The student is able to observe and describe a movement technique accurately.

2. The student is able to determine the anatomical and mechanical factors basic to the performance of an observed movement.

3. The student is able to evaluate the suitability of a performer's technique with reference to the task at hand.

4. The student is able to identify those factors which limit performance and to establish a priority for change in those factors most likely to lead to improvement in performance.

## III. FACILITIES AND EQUIPMENT

The requirements of this course cannot be completed satisfactorily unless suitable laboratory space and equipment are available.

### A. LABORATORY

There should be a separate room of adequate size (a minimum of 600 sq. ft.) specifically designated as a laboratory and suitably equipped to accommodate undergraduate student laboratory experiences. (Enrollments for laboratory sections should not exceed 20).

### B. EQUIPMENT

Although not necessarily part of a permanent inventory, the equipment listed should be available for use in undergraduate kinesiology.

1. Essential Equipment

   a. Anatomical charts and models
   b. Goniometers
   c. Motion picture camera (variable speed)
   d. Motion picture projector (variable speed)
   e. Slide projector or overhead projector or opaque projector
   f. Stop watches or equivalent timing devices
   g. Scales (height and weight)
   h. Film library

2. Desirable Equipment

   a. Electrogoniometer
   b. Electromyograph
   c. Film reader or motion analyzer
   d. Force measurement device(s)
   e. Polaroid camera
   f. Polaroid sequence camera
   g. Programmable calculator
   h. Strip chart recorder
   i. Video-tape equipment
   j. Strobe
   k. Computer terminal (in-house)
   l. Photoelectric cells
   m. Oscilloscope
   n. Reaction board
   o. Film editor

## IV. FACULTY

Teachers of undergraduate kinesiology should be specialists whose academic preparation includes graduate specialization in kinesiology and whose continuing education includes additional course work or workshop attendance. In a field where knowledge is expanding at a very rapid rate, the need to participate in activities which assist with the process of keeping current is critical. Doctoral students specializing in kinesiology should be encouraged to assist in the teaching of undergraduate kinesiology but should not have sole responsibility for these courses.

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[1]The courses in which the student would most likely develop these entering competencies are human anatomy and pre-calculus mathematics.

[2]The use of calculators in demonstrating competency in the operations listed is encouraged.

[3]The order of presentation of standards should not be interpreted as the recommended order for planning a course.

[4]It may not be necessary to include this section if material is covered in other courses such as motor learning and development.

## GUIDELINES AND STANDARDS FOR UNDERGRADUATE MOTOR DEVELOPMENT

The following minimum competency guidelines in Motor Development at the undergraduate level may be gained in one or more motor development courses or through other courses provided in an undergraduate curriculum.

### I. PREREQUISITES

A. One primary prerequisite for Motor Development is that the student is able to describe movements accurately using appropriate anatomical terminology.

B. Course work in child/adolescent or life span psychology is a desirable prerequisite.

### II. COURSE KNOWLEDGE (MINIMUM EXIT COMPETENCIES)

#### A. FORMULATION OF A DEVELOPMENTAL PERSPECTIVE

The student is able to:

1. define lifespan motor development.
2. compare and contrast lifespan motor development with other study in human movement e.g., Motor Learning, Biomechanics, Phsyiology of Exercise, etc.
3. understand the various levels of analysis that have been used in the study of motor development (i.e., performance scores, motor sequence descriptions, kinematic data) and appropriately apply information each level produces.
4. view an individual's motor behavior as "more" or "less" advanced on a developmental continuum rather than as "good" or "bad".
5. discuss advantages and shortcomings of the major methodologies associated with the study of change.
6. describe the research of several historical and contemporary scholars in motor development.
7. compare and contrast maturational, interactional and environmental views of causation in motor development.
8. derive principles/concepts of motor development and apply those concepts to teaching/learning situations at various points in the lifespan.
9. show a general understanding of the neural, physiological, psychosocial, perceptual, and cognitive changes that occur across the life span.

## B. KNOWLEDGE OF CHANGING MOTOR BEHAVIOR ACROSS THE LIFESPAN

The student is able to:

1. compare and contrast between inter-task and intra-task developmental sequences in selected skills.

2. provide descriptions of both motor performance score changes and motor pattern changes for selected motor skills, that:

   a. demonstrate knowledge of the data available for certain portions of the lifespan.

   b. demonstrate the ability to hypothesize or extrapolate for sections of the lifespan where data are not available.

   c. demonstrate knowledge of the difference between fact and hypotehesis.

3. describe the primitive reflexes that are inhibited,and the postural reactions that appear prior to birth, or in the first year of life, and explain the neural development accompanying these changes.

4. relate the inhibition of specific reflexes and appearance of specific reactions to the development of particular voluntary motor skills.

5. describe the inter-task "motor milestones" that lead to upright locomotion and visually guided reaching.

6. describe lifespan sex differences and similarities in motor development.

7. discuss the concept of regression as it potentially relates to specific portions of the lifespan.

8. discuss lifespan changes in selected movement dimensions such as balance, timing, or force production/control.

## C. FACTORS WHICH AFFECT MOTOR DEVELOPMENT

1. Physical growth and physiological changes

   The student is able to:

   a. define the terms that are unique to the areas of physical growth and biological maturation.

   b. identify the genetic and environmental factors which influence growth and biological maturation.

   c. discuss embryonic and fetal growth and biological maturation.

   d. describe and interpret the normal curve, and displacement and velocity graphs of human growth.

e. discuss proportional changes in segmental length, breadth, and circumference from birth through early adulthood.

f. describe variations in biological maturity (i.e., early, average, late) within and across sexes.

g. identify the key methods of assessing biological maturation.

h. discuss secular trends in physical size and biological maturation.

i. discuss the characteristics of the adolescent growth spurt.

j. demonstrate knowledge of major changes in body composition and physiological functioning in males and females across the lifespan.

k. describe "catch up" growth and developmental plasticity and the factors affecting each.

l. discuss the effect of exercise on body systems and body composition such as bone and muscular development, cardio-respiratory capacity, etc.

m. analyze the relationships between growth, biological maturation, and physiological changes and motor skill development.

2. Perceptual and cognitive changes

The student is able to:

a. discuss changes in cognitive processing across the life span.

b. understand variations in cognitive processing mechanisms within an age group.

c. analyze the effect of cognitive processing differences within and across age groups on motor skill performance and development.

d. evaluate cognitive processing demands of motor skill performance.

e. discuss changes in perceptual functioning across the lifespan.

f. identify perceptual demands in motor skills.

g. analyze the relationship and interaction between perceptual and motor development.

3. Socio-cultural practices

The student is able to:

a. list and describe socio-cultural correlates which may affect motor development.

b. understand and critically evaluate the relationship between socio-cultural correlates (such as socio-economic level, child rearing practices, significant "others" etc.) and motor development.

c. compare and contrast cross-cultural practices on motor skill development.

4. Intervention

The student is able to:

a. discuss the effects of environmental deprivation (social, psychological, sensory, etc.) on lifespan motor development.

b. discuss the effects of enrichment, special practice, and teaching on lifespan motor development.

c. define and discuss the concepts of critical or sensitive periods, phylogenetic and ontogenetic skills, and co-twin control.

## D. APPLICATION OF MOTOR DEVELOPMENT KNOWLEDGE

1. Observation of the developmental levels of performers

The student is able to:

a. demonstrate that movement observation requires prior planning of observation strategies such as where to stand to best see the performer's movement and what "critical features" of the movement will be observed.

b. accurately categorize performers' movement into developmental levels using one of the available developmental sequence category systems.

1) first, with media-assistance such as films or video-tapes.
2) secondly, in live observation.

2. Initiation of change in a performer's movement

The student is able to:

a. identify and order from simple to complex those environmental variables which could influence a performer's developmental level (e.g., size, weight, color of equipment).

b. demonstrate the ability to individualize physical education instruction to accommodate the developmental levels of each learner.

c. discuss the potential relationship between motor skill regression and environmental complexity.

d. demonstrate the application of motor development principles to the design of equipment/play space/living environments for persons at various portions of the lifespan.

3. Program planning

The student is able to:

a. demonstrate the ability to apply the principles of motor development to planning physical activity programs for individuals in varying portions of the lifespan e.g., preschool, childhood, adolescence, early and late adulthood.

b. demonstrate awareness of within-age individual differences in planning physical activity-programs for any portion of the lifespan.

c. discuss the effects of athletic competition on the growth and development of children and adolescence.

4. Assessment of motor development

The student is able to:

a. demonstrate familiarity with growth and evaluation tools.

b. discuss the use of developmental sequence checklists as a means of formative and summative evaluation of motor development.

c. critique current motor development screening tests/scales.

d. correctly administer at least one motor development test and interpret its results.

e. distinguish motor problems they are able to assess from those they are not qualified to assess.

f. identify appropriate resource persons for referral testing of motor problems.

g. identify those motor behavioral characteristics associates with children who are developmentally lagging in their motor skills.

## GUIDELINES AND STANDARDS FOR UNDERGRADUATE PHILOSOPHY OF HUMAN MOVEMENT ACTIVITIES

Basic competencies required by the undergraduate Physical Education student in the area of the Philosophy of Human Movement Activities.

Our committee was hesitant to suggest explicit content competencies in the area of Philosophy of Human Movement Activities because the emphasis becomes one of providing the student with what is "already known" instead of guiding them to discover things for themselves. This emphasis of having students discover and search for themselves is essential in the philosophic process and it should be kept in mind when examining these competencies.

Our committee strongly recommends that the student have at least an Introduction to Philosophy course as a prerequisite. Additional courses in Logic, Ethics, and History of Philsophy would be ideal but not essential.

### I. PHILOSOPHICAL BACKGROUND

The student will be encouraged to:

A. To have basic understanding of the nature of philosophy and the metaphysical, epistemological, axiological, and aesthetic concerns that philosophy addresses.

Sample Questions:

What is the nature of the philosophic process?
What is the relationship of philosophic and science?
Distinguish between moral virtues and special virtues in ethics?

B. To demonstrate an ability to do philosophy and write in a philosophic manner.

What methods do philosophers use to understand the area of study?
What should be considered when writing for or addressing the lay public, the professional in the teaching and coaching fields, the academic community?

C. To understand the philosophic process as it relates to the study of human movement activities (sport, play, dance, exercise, games, and physical education).

How does philosophy contribute to the understanding of human movement?
What does philosophy contribute to the physical educator and coach?

D. To be knowledgeable of the history of the philosophical enterprise in the field of physical education.

What were the contributions of leading philosophers in the field of physical education?
What were the major philosophical issues affecting the field of physical education?
What are the philosophic traditions of current philosophers of physical education?

## II. METAPHYSICS AS IT RELATES TO THE HUMAN MOVEMENT ACTIVITIES

The student will be encouraged:

A. To examine the nature of sport, dance, exercise, play, games, and physical education and to explain how they are similar, different, and inter-related.

What is the nature of various human movement activities?
What are the structures of sport that distinguish it from other movement forms?

B. To understand the potential meaning and significance that human movement activities have on the participants.

What is the connection between movement and being human?
How does sport, dance, exercise function to create a meaningful environment?
Why do people participate in human movement activities?
What is the role of physical education in providing meaningful movement activities?

C. To understand the mind/body problem and the potential impact on human movement activities.

What is the background to mind/body problem?
What impact does this have on teaching and studying human movement activities?
What is important about understanding human embodiment for the movement participant?

## III. AESTHETICS AS IT RELATES TO HUMAN MOVEMENT ACTIVITIES

The student will be encouraged:

A. To understand the nature of aesthetics as it relates to the spectator's perspective of human movement activities.

What is the nature of beauty in sport?
How is sport an art to the spectator?

B. To understand the nature of the aesthetic experience for the human movement participant.

What is aesthetic experience in sport and dance?
How does the participant create in one's movement activity?
How does the affective domain of physical education contribute to the participant's aesthetic experience?

C. To have a basic appreciation for the relationship between movement activity and art.

In what ways has sport been used as a medium for artists?
How is the process of creation similar for the artist and athlete?

## IV. EPISTELOLOGY AS IT RELATES TO HUMAN MOVEMENT ACTIVITY

The student will be encouraged:

A. To understand the type of knowledge that can be obtained from participation inhuman movement activities?

What is the potential knowledge the participant gains about self, others, and the movement form specifically?
Does skill level affect the degree of knowledge available?

B. To understand the various theories that may be used to determine the validity of knowledge in human movement activities.

What are the philosophic theories to determine the validity of knowledge in human movement?
What are the limitations of the scientific study of physical education?

## V. AXIOLOGY AS IT RELATES TO HUMAN MOVEMENT ACTIVITIES

The student will be encouraged:

A. To understand the nature of values and ethics as they relate to physical education.

Should physical education be offered as an elective at the secondary level?
What types of courses should be offered in the physical education department?
Should boys and girls participate together in physical education?

B. To understand the nature of values and ethics as they relate to athletics.

What is sportsmanship and the emphases that it should receive?
What is the role of athletics in the educational process?
Who should govern women's inter-collegiate athletics?

C. To examine one's personal values in relation to human movement activities.

Is it more important to play well and lose or to play poorly and win?
How can value clarification aid the coach and teacher?

Bibliography is available from: NASPE
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